INTRODUCTION

1. Geography

Derivation of the Name 'India'. The name 'India' is derived from Sindhu (Indus), the name of the great river in the North-west, the zone where developed the first contacts of the country with the external world. Sindhu assumed an intermediate form in Īrānian of which Persian Hind is an echo, and from which Greeks and Romans got the name India. The name was doubtless first applied to the part of the country best known to them before being extended to the whole. In the traditional and legendary cosmography of the Hindus, it is called Bharatakhaṇḍa, part of Bhāratavarṣa to the south of the Meru (golden mountain); by another account, it is Jambūdvīpa, one of the seven concentric islands comprising the earth.

Geographical and Political Unity. India is a vast subcontinent which juts from the middle of South Asia into the Indian Ocean. It extends from south to north for 3,200 km. between 8°4′ and 37°6′ North parallels of latitude and its greatest breadth from east to west is 3,000 km. between 68°7′ and 97°25′ East meridians of longitude. Striking physical features of mountain and sea combine the whole vast area of 32,80,483 sq. km. into a single natural region. The early realization of the natural geographical unity of India by the thinkers of the land finds expression in the formulation of the ideal of a universal emperor, *Cakravartī* or *Sārvabhauma Samrāṭ,* the ceremonial of his installation is detailed in the *Aitareya Brāhmaṇa,* and in the definition of *Cakravartīkṣetra* by Kauṭilya as including the whole of India from the Himālayas to the seas and a thousand *yojanas* across. Religion reinforced this sense of geographical unity by fixing centres of pilgrimage at the extremities—Hinglāj, Badrī, Purī (Puri), Kanyā Kumārī (Kanniyā Kumārī) and Dvārakā (Dwārka). Seldom, however, did this unity materialize as a political fact; it was nearly attained under the Mauryas and the Mughals, and again fully under British rule in the 19th century. During most of the historical period, the land was divided into a number of states of varying sizes and constantly shifting boundaries.

The Himalayas. The Himālayas constitute a formidable crescent-shaped barrier separating Sinkiang and Tibet from India along its wide northern frontier and containing the highest mountain peaks in the world. They are famed in immemorial legend and literature as the abode of gods and sages; as the home of Pārvatī—the throne of her consort (Mount-Kailās) adjoining one of the holiest *tīrthas,* lake Mānasarowar; and as the source of innumerable life-giving rivers of India including the Gaṅgā (Ganga), the holiest of them all. Two mighty rivers, the Sindhu

in the north-west and the Brahmaputra in the east, garland the Himālayas at either end of their length of over 2,500 km. The perennial snows of the Himālayas are as important for the hydrography of India as the two monsoons or seasonal winds from the north-east (November-May) and the south-west (June-October). The Brahmaputra is a continuation of the Tibetan Tsangpo, called Dihāng or Siāng after its entry into India; the union of Dihāng with two other confluents, the Dibāng and the Luhit (Tellu), produces the Brahmaputra. From the great central range of snowy peaks to the Indo-Gaṅgā plain there is a width of about 150 to 400 km. of mountain country. The Himālayan valleys must have been occupied by Indians fairly early in the development of Indo-Aryan civilization. The magnificence of the forest scenery of the Himālayas is indescribable. The outer ranges of the Siwāliks, a more recent formation of broken and disintegrating hills that form the first step upward from the plains, are famous in geological annals for the wealth of palaeontological evidence which they have given to the world. The Central Himālayas are bordered by fever-haunted jungles known as *tarai* or, on the extreme east, *duārs*; within their embrace, however, immediately south of Nepāl, are hidden the buried remains of some of the most famous medieval Buddhist cities. The passes across the Himālayas are few, very elevated, and precarious; and all of them strike into the elevated tableland of Tibet 'the roof of the world'. None of them except Natu La and Jelep La is usable except for small-scale trade, and none contributes anything now to the material prosperity of India. Simla and Darjeeling are the chief hill-stations naturally connected with the main roads intersecting the mountains. Simla is situated on the parting of the waters between the Sutlej and the Yamunā (Yamuna) and marks the great divide of the Indo-Gaṅgā plain.

The Hindu Kush. The Himālayas are continued by the Hindu Kush and its offshoots in the west and the Lushai hills on the east. The Hindu Kush is the range *par excellence* of Northern Afghānistān where the province of Kābul touches the very heart of the mountain masses which buttress the Pamīrs. Though rugged and elevated, the Hindu Kush is not Himālayan in its mountain characteristics. There are few high peaks, and several depressions which allow easy access between north and south. However, it is not the Hindu Kush itself but the inconceivably difficult approaches to which its passes lead, that form the northern barrier to India. Historically, the most important of the Hindu Kush passes is that which gives its name to the mountain, meaning 'Hindu Killer', from the fate which once befell a Hindu force on its summit; it is but one of a group of passes leading from the Oxus basin to Kābul. This way came the Aryans into India and Alexander with his Greek legions and many successive tides of human migration, Scythian, Mongol etc. Below the Hindu Kush stretch the narrow irregular border districts

of the Paṭhān highlands, full of wild tribes, a country all mountainous, through which run the chief passes between Afghānistān and India—the Khyber, the Kurram, the Tochi and the Gomal in succession from north to south. The Kābul river at the north foot of the Safed Koh drains the southern slopes of the Hindu Kush which, from the far north, extends its long level spurs parting the waters of many historic rivers such as the Kunar, the Panjkora and the Swāt. On the western border of India between this mountain region and the Arabian Sea lies Baluchistān with its banded formation of hills rising in altitude one behind the other from the lower Indus valley plains to the great limestone backbone of the Sulaimān system. Sometimes these ranges present an impassable wall of great natural strength for hundreds of kilometres like the Kīrthar range stretching northwards from the Karāchi frontier to the passes of Kalāt. Elsewhere, the transverse lines of drainage open up narrow rock-guarded gateways leading upwards from the plains to the plateau, such as the passes of Mula, Mashkat and Bolān. South of Quetta, about the latitude of Kalāt, a division occurs in this banded gridiron formation. The outer easternmost ridges retain their original strike and reach down southwards to the sea. The inner ridges curve westwards and run east to west in Makrān in rough lines parallel to the border of the Arabian Sea and through Īrān to the north of the Persian Gulf. Makrān, which is now mostly a desert, had at one time better water supply and was not only habitable but also fertile; even now it includes long narrow valleys of great fertility where date-palms flourish and fruit is cultivated amid fields of wheat and maize. Alexander used the difficult land route across Makrān to withdraw from India with a part of his troops.

The North-west. The North-west is the key to India proper and to much of her history. It is continuous on the south with the vast plain of Hindustān, the Āryāvarta of Manu. More than once in our long history, the North-west has for some time formed part of the Western and Central Asian State system. The Achaemenid rulers of Persia (Īrān), Cyrus and Darius I, conquered the Punjab and part of Sind, annexed them as the satrapies of Gandhāra and India, and started political and cultural contacts between India and Īrān. These contacts, often broken but always revived, characterize the history of the region destined in the 20th century to become Pākistān.

Kashmir. The square block of Kashmīr territory is traversed across its breadth by the deep trough of the Indus which changes suddenly to a south-westerly course a little to the east of Gilgit to make its way to the plains of Peshāwar through wild and unapproachable mountains. The beauty of Kashmīr is the beauty of its western and southern districts where Nanga Parbat overlooks the Indus or Harāmukh is reflected in the purple waters of the Wular lake. In Kashmīr are contained the great reservoirs from which is drawn the water-supply that irrigates the vast

flat plains of the Punjab. Kashmīr was from early times an influential centre of Hindu culture; it was a home of Sanskrit scholars and poets; it helped in spreading Indian culture to Central Asia and produced in Kalhaṇa the only true Indian historian of antiquity.

The Brahmaputra. The Brahmaputra and its confluents with their potentialities for the cultivation of tea, coffee and fruit, dominate the North Eastern Frontier, where live the sub-Himālayan tribes (the Daflas, Abors, Moubas, Mishmis and others). There are no easy roads in this region and the very heavy rainfall concentrated in a third of the year washes away the tracks and promotes a dense growth of forest. Thanks to the impossible Tibetan plateau and the difficulty of the eastern frontier (*pace* occasional Burmese and Shan raids on Assam), the meeting points of Chinese and Indian cultures were found only in Turkestān by way of Balkh (Bactria) in the Oxus valley and in North Annam by way of the sea.

Indian Subcontinent—The Ganga Plain. The main part of the subcontinent easily falls into three major geographical and cultural divisions: the Gaṅgā plain, the central belt of hill and desert, and the Peninsula. The broad stretch of low flat country known as the Indo-Gaṅgā depression is, in some respects, the most important physical feature of India; it extends from the delta of the Indus to the delta of the Gaṅgā, though the only access from the Punjab to the basin of the Gaṅgā is along the narrow interval between the northern edge of the Rajāsthān desert and the Himālayas. This is a strategic point where the destinies of India were decided in battle at least on five occasions in historical times. Delhi stands just south of it. In the basin of the Gaṅgā have ever been founded the chief kingdoms of the plains, the most ancient cities, the earliest centres of Indo-Aryan civilization, industry and wealth. The mighty river has silently worked through the ages in an unceasing process of regeneration of the soil, spreading life and strength among the millions who venerate her as Mother Gaṅgā and purify themselves in its sanctifying waters at the *tīrthas* of Haradvāra (Hardwār), Prayāga and Vārānasi. In the entire plain there are hardly any hillocks to break the uniform regularity of its alluvial surface, which is unfathomable in its depth as borings to a depth of 300 m. have failed to touch the rock bottom. The result is that river courses are often very unsteady and wander over beds 30 to 45 km. wide, the Sindhu being the worst offender in this respect. But the land is extraordinarily fertile and the prevailing evidence of agricultural wealth becomes almost oppressive in its monotony.

After the confluence of the Gaṅgā with the Brahmaputra, the country widens out into an endless panorama of irrigated fertility, a wide net-work of canals, and an endless procession of picturesque villages containing a swarming population. The rainfall is certain and abundant, and it is in the Assam hills south of the Brahmaputra that the highest rainfall

in the world is recorded. The Gaṅgā and its tributaries, draining the southern slopes of the Himālayas from Simla eastwards, trace magnificent curves through the flat lowlands, carrying fertility and wealth to the plains of West Bengal. A notable addition to the Yamunā, and so to the Gaṅgā also, is made by the rivers Chambal and Śoṇa (Son) which drain the gradually rising slopes of the Central Indian plains. The wealth and population of India have been concentrated in the valley of the Gaṅgā, and in its shady groves were conceived those profound doctrines of moral philosophy that the world acclaims today as the authentic wisdom of India.

Mahanadi Basin. Though separated from Lower Bengal by a broad band of hilly country, the basin of the Mahānadī (Mahānadi) differs very little in its essential physical characteristics. Its delta forms the chief feature of the fertile flats of Orissa, very similar in every way to those of Lower Bengal. Not far from the mouth of the Mahānadī, on the shores of the Bay of Bengal, is situated the temple of Jagannātha at Purī, one of the most sacred shrines of India.

The Aravalli Range. Parallel to the course of the Sindhu from the north-east to south-west is the oldest mountain range of India, the Arāvalli, which divides Rājputāna (Rājasthān) into two unequal parts. On the north-west lies Thar or the Great Indian Desert, which has always proved to be a more effective barrier against foreign inroads than the Indus itself. Arid, hot and desolate, it extends for 480 km. between the Indus and the Arāvalli; there are, however, two cities in this region—Jaisalmer and Bīkaner. South of the Arāvalli, Rājputāna almost forms part of the Gaṅgā basin with the Chambal and its affluent Banās draining northwards to the Yamunā, and here are the great Rājpūt cities—Jaipur, Ajmer, Udaipur and Jodhpur. Even here the sandy desert feature is not altogether wanting, especially around the famous salt lake of Sāmbhar. The atmosphere is still the sweet pure air of a dry desert, and the climate, with somewhat sharp extremes of temperature, is that which might well breed a race of men such as the heroes of the epics and the Rājpūts of Indian history.

The Vindhyas. The Gaṅgā plain slopes gently upwards towards the south to a central transverse water-parting which crosses the subcontinent from west to east about 23° North Parallels of latitude. It constitutes the Vindhyas, a rugged mountainous tract varying much in width and elevation, which has offered shelter to several more or less primitive pre-Aryan tribes with their own culture and language. On the south of the Vindhyas, there is a steep fall from the crest to the deep narrow trough of the Narmadā (Narmada) valley bounded on the south by the Sātpura-Mahādeo-Maikala range. From the southern slopes of the Sātpuras, the Tāpi (Tāpti) flows parallel to the Narmadā to the west and the Mahānadī to the Bay of Bengal in the east. This double wall effectively divides

the Peninsula from the northern plain. Though this has not seriously hindered intercommunication, it rendered political unification difficult in the past, and the mighty warrior Harṣa was effectively stopped on the banks of the Narmadā from extending his power into the Deccan in the 7th century A.D.

Peninsular India. From the tip of the Peninsula at Cape Comorin, the Malabār and Coromandel Coasts extend for 1,500 km., the one to the north-west and the other at first northward, and then to the north-east. There are a few good natural harbours along either coast, though the west is a little better off, with Cochin, Goa and Bombay offering safe anchorage for ships. Located half-way on the maritime routes from the Mediterranean and Africa to China, Peninsular India developed and maintained a fairly brisk maritime trade with the nations on either side, and had a large share in the colonization of the eastern lands across the Bay of Bengal. And its rulers, at least some of them like the Sātavāhanas, Pallavas and Coḷas, are known to have devoted particular care to the maintenance of a strong navy. An early account of the ports of Peninsular India and the conditions of maritime trade is found in the anonymous Greek tract, *The Periplus of the Erythraean Sea* (1st century A.D.).

The nucleus of the Peninsula is a triangular block of very old rocks that cover its greater part from the Sātmāla-Ajanta ranges to the Nīlgiris. This has a typical plateau relief; its western edge is a steep brink, the Western Ghāts, overlooking the West Coast formed by a narrow strip of rough, wet lowland; its surface has a gentle fall to a lower brink in the east, the Eastern Ghāts. Between the Eastern Ghāts and the Coromandel Coast is a belt of lowland, the Karṇāṭaka (a strange misnomer), much wider, smoother and relatively drier than the western strip. The Eastern Ghāts curve west and meet the Western Ghāts in the Nīlgiris with the Doda Betta peak at a height of 2,637 m. Immediately south of the Nīlgiri plateau lies the only break in the continuity of the Western Ghāts, the Pālghāt or Coimbatore gap, which is about 30 km. from north to south and affords lowland access from the Karṇāṭaka to the Malabār coast at a level of 144 m. above the sea. This easy road into the Karṇāṭaka from Cochin, Calicut and other ports of the west has played an important role all through history. South of the Pālghāt gap, the Ghāts reach an even greater height at Anai Mudi peak (2,695 m.) and strike south-eastwards, terminating in Cape Comorin. Here is produced much teak and coffee; there is also valuable game including the elephant. It is inhabited by hill tribes like the Kāḍar, Muduvar and Pulayan. The crest line of the Western Ghāts is generally at a distance of from 50 to 80 km. from the Arabian Sea, although in places it approaches so close to the shore as to restrict the width of the coastal plain to no more than 7½ km., and it is not uncommon for spurs and ridges to end as cliffs along the coast.

North of Goa the surface of the Ghāts is covered with thick basaltic

lava-flows—the Deccan Traps of Indian Geology. The Marāṭhās found it easy to fortify many of the flat, weathered hill-tops in this area. The uplands around Poona, clothed with the volcanic cotton soil, are quite as fertile as the alluvial valleys of the Narmadā and Tāptī rivers. Passes across the Western Ghāts here are few, and two of the best known are the Thalghāt carrying the road and railway from Bombay to Āgra, and the Bhorghāt which likewise connects Bombay with Poona.

The Eastern Ghāts are irregular, scattered, broken and of much lower altitude than the Western Ghāts. The Deccan plateau has a general elevation of 600 metres and the general slope is towards the south-east as indicated by the course of the major rivers—the Godāvarī (Godāvari), Kṛṣṇā (Krishna) and Kāverī (Cauvery), all of which rise near the Arabian Sea and empty themselves in the Bay of Bengal.

Lying athwart the course of the Arabian Sea branch of the south-west monsoon, the Western Ghāts bring about a striking difference in rainfall between the regions on either side of them. While the monsoon literally pours in the west (the annual average of Mahābaleshwar is 750 cm.), in the Deccan plateau the rainfall (less than 100 cm.) is not enough to support a vegetation of tall evergreen trees, though teak is cultivated in some places under plantation conditions, and forests of odoriferous sandalwood abound in Mysore and near about.

Cities. Cities generally rose at the banks of rivers and on trade and pilgrim routes. The ancient Magadhan capital Pāṭaliputra occupied a secure position between the protecting waters of the Gaṅgā and the Śoṇa; but the modern city of Patna lies about 18 km. below the confluence and has lost the strategic advantages of the old city. Sāñcī (Sanchi) stood at the junction of several routes from upper Gaṅgā valley to Ujjayinī (Ujjain) and thence to Pratiṣṭhāna (Paithan) and Deccan in the south and westwards to the sea. Bharukaccha (Broach) was probably an important city in the Western viceroyalty of the Mauryan empire. Many other examples may easily be mentioned. The advent of the European powers by sea brought in a new factor, and Madras, Bombay and Calcutta are examples of big cities that have grown out of clusters of small villages to support the trade and political expansion of the English East India Company. Many other commercial centres rose and fell on the coasts under similar influences. Pondicherry and Goa are notable instances.

The geography of Upper India favours uniformity of culture, but the area is vast and even the Mughals held it together with difficulty. The smaller and better defined geographical units of the Peninsula fostered cultural variety and the development of conscious and politically well-knit communities. On the other hand, the North was open to many external influences from the north-west. There is also a perceptible difference between the extremes of the continental climate of the North and the generally more equable one of the South. Thanks, however, to planned

large-scale enterprises in irrigation and electrical engineering, and the development of aerial transport and other technological factors of the modern age, the limitations imposed by geography and climate are being altered and overcome and the geo-political and strategic conditions of the future may be very different from those of the past.

Recent Geological Changes. There is little evidence of any vast changes during historical times in the geological configuration of India, and it is wrong to interpret the Tamil literary tradition regarding subsidence of land under the sea as references to the Gondwāna and Lemuria of the geologists. But some changes of a less sweeping nature have occurred, and failure to take account of them may create difficulties in following old accounts like the story of the exploratory voyage of Nearchus. Tamluk, Koṛkai and Kāyal described as flourishing ports in ancient times (Koṛkai and Kāyal even as late as Marco Polo's time) are now land-locked villages, and parts of Māmallapuram (Mahābalipuram) and Kāveripaṭṭiṇam may well have fallen victims to sea erosion. The Vedic river Sarasvatī is now represented perhaps only by the dry bed of the Ghagger. There is need for caution in the use of modern maps while studying ancient India.

2. Periodization of Indian History

On a strictly logical view, the history of any country is an indivisible unity, in which ideas, events, and personalities act and react on one another often in an obscure and intangible manner. But such complex wholes do not lend themselves to clear exposition or convenient study until they are broken up into manageable units, and this process is bound to be somewhat arbitrary and conventional. And the division which may be excellent from one point of view may not be so convenient from another. Yet, in general, some compromise is possible between the rival divisions that present themselves to the mind.

One obvious line is that between pre-history and history. Man lived through scores of centuries in India as elsewhere before recorded history begins. And though the Indus Valley Civilization has yielded some hundreds of pictographs, particularly on seals, they have not yet been deciphered, and it is, therefore, best to include that civilization also in pre-history or proto-history. Though that civilization may be shown to have contributed some notable elements to the historic civilization of India, the continuous history of the latter, which we may well describe as Indo-Aryan (*pace* the recent stress on the pre-Aryan content of our culture as a whole) starts mainly after the settlement of the Aryans, particularly over the entire Indo-Gaṅgā plain, and the more or less complete fusion of races and cultures, Aryan and pre-Aryan. It is difficult to suggest

a definite date, but perhaps 1500 B.C. will receive wider assent than any other. The Aryanization of the Deccan and the Far South must be put much later. However, the 3rd or 4th century B.C. recently suggested by archaeologists for the coming in of Megalithic culture, which seems to be closely associated with rice cultivation and Dravidian speech, may turn out ultimately to be too recent.

For well over 2,500 years after the Aryan settlement, ancient Indian Hindu civilization, if we use the word Hindu in a broad sense so as to include Buddhism and Jainism, developed and unfolded itself and even spread outside India to Central Asia, Indo-China and Indonesia. The impacts due to contact with the Persians, Greeks, Śakas, Pahlavas and the Hūṇas did introduce new elements both into culture and population, but effected no fundamental change. Hindu culture bade fair to go on for ever, till Islāmic inroads brought to it many new, strange and powerful elements in race, religion and culture. India, however, stood up to Islām much better than many other lands in Asia, Africa and Europe, and the first onrush of the Islāmic tide was effectively stemmed after its establishment in a relatively unimportant corner of the country (Sind) early in the 8th century A.D. Elsewhere, particularly on the West Coast, Muslim Arabs were able to continue the time-honoured pre-Islāmic trade relations with Indians on mutually acceptable terms of peaceful co-existence. The provinces of Kābul and the Punjab were also lost to Islām in the 11th century, but the effective Muslim conquest of India proper did not begin until the last quarter of the 12th century. This may be said to have been in progress until about A.D. 1338 when it reached its widest extent, though only for a short period, under Sulṭān Muḥammad Tughluq. Opinions may well differ as to the definite date of demarcation between the pre-Muslim and Muslim periods of Indian history. But a strong case can be made out for fixing it at A.D. 1206 when Qutbu'd-dīn Aibak proclaimed himself the first Sultān of Delhi and that date has been adopted in this volume. The Muslim invaders, Turks first and then Afghāns, Mongols and others, found it easy and tempting to make their homes in India, losing contact with their original homelands in course of time. Opinions differ as to whether the natural and inevitable give-and-take between Muslims and Hindus in the long centuries of Muslim rule may be said to have brought a new Hindustānī culture into existence, or the old Hindu culture must be held to have continued to be its old self with minor readjustments to suit the new milieu; the admixture of Islāmic cultural elements and the proportion of Muslims to Hindus have differed in different regions, being highest in those that have gone into Pākistān, and lowest in South India, mainly due to the historic role of Vijayanagar.

Vasco da Gama had touched Calicut nearly three decades before Bābur laid the foundations of the Mughal empire at Pānīpat. But the

command of the Indian Ocean by the Portuguese in the 16th century, the struggles between them and their first rivals, the Dutch, and the mutual antagonisms among the Dutch, the French and the British, only touched the fringes of Indian polity and economy for quite a long time. The full effects of the Western impact were not felt till the middle of the 18th century. The Europeans did not find the Indian climate suitable for their permanent settlement (unlike their Muslim predecessors), and so the British, who won the race for power bent their energies to develop India as a colony for exploitation. The battle of Plassey (1757), the battle of Buxar (1764), or the grant of the *Dīwānī* of Bengal, Bihār, and Orissa to the East India Company (1765), may be suggested as the beginning for the period of British rule in India. But another date 1761 commends itself better when we recall that this was the year in which their chief European rivals, the French, were decisively defeated and had to surrender Pondicherry (Janaury 16); the Marāṭhās, their chief rivals for the rule of India after the French, suffered a decisive setback at Pānīpat two days earlier; and on the intervening day (January 15) the Mughal emperor Shāh 'Ālam II was defeated in battle on the Son and had to make his peace with the English on their terms. British rule in India has now become a closed chapter since August 15, 1947, and that date marks the end of our narrative.

14-1-1761

3. Chronology—Indian Eras

Vedanga Jyotisa. The earliest method of reckoning time in India was mentioned in *Vedāṅga Jyotiṣa,* astronomy ancillary to the Vedas. It was evolved *inter alia* with the object of regulating the performance year after year of seasonal sacrifices on the correct performance of which the welfare and prosperity of the community was held to depend. This was a primitive and rough method of observation which was still current or at least remembered at the time the *Kauṭilīya Arthaśāstra* was written. The extant text of *Vedāṅga Jyotiṣa* is a short work in verse of indefinite date (perhaps not later than 400 B.C.) and contains contradictory data on the commencenent of the year, probably because of a later revision. It recognizes a cycle (*yuga*) of five years of 360 days each completed by an additional month of thirty days, making a total of 1,830 days (solar), as against an actual 1,826¼.

Traditional Divisions. In general, we may say that the traditional Indian divisions of time follow the revolutions of the Moon, the Sun, and in an ancillary sense, Jupiter (Bṛhaspati); these luminaries delimit respectively the month, the year, and the cycles of twelve or sixty years. The durations of month, year and cycle so defined are not simple multiples of each other; the month is not an integral number of lunar revolutions,

nor the year an integral number of months, nor the cycle of Bṛhaspati an integral number of years; and so a complex system of conventions and compensations, which varies in the different astronomical works, has come into existence, seeking to reconcile the results of theory and those of actual observations.

Indian Eras. There is not sufficient evidence that until the 1st century B.C., any definite era was employed in India to record the date of an event; early inscriptions are generally recorded in regnal years of the ruling kings, like the Aśokan inscriptions. The idea of counting dates from a fixed year over a long period of time seems to have been brought into this country by the invaders from the north-west of India who have left the earliest inscriptions of India dated in this manner. We must note, however, that the oldest Indian eras, which have a religious basis and begin with the *Nirvāṇa* of Mahāvīra and of Buddha, may appear to contradict the hypothesis of foreign origin of the reckoning in eras; but there is no definite evidence of the early use of these eras. They may well have been the product of later calculations based on tradition. The Buddha era dates from 544 B.C., according to Ceylonese reckoning. The Mahāvīra era starts from 527 B.C., and is used mostly in Jain works. Modern criticism has shown that the Ceylonese epoch of the Buddha's *Nirvāṇa* is some sixty years too early, the true date being 483 B.C. ; another view based on Chinese evidence puts it in 486 B.C. The Ceylonese date has been accepted by the Government of India in celebrating the 25th centenary of the *Mahāparinirvāṇa.*

Once the system was adopted, there came up in the course of centuries quite a number of eras which now cause great embarrassment to the historian, particularly because there is often no clear indication of the specific era used in the context.

It would be impossible to discuss here the numerous questions connected with these. We can mention only the more important reckonings indicating their probable origin and the extent of their use. Some eras go back to a time earlier than the Aryan invasion; such are the *Kaliyuga* and the *Saptarṣi* eras. The former is a fictitious epoch confirmed by Āryabhaṭṭa (5th century A.D.) and employed in astronomical text books with a starting date at February 18, 3102 B.C., apparently the result of calculation made in the early centuries of the Christian era, and not of a tradition from pre-Vedic times. This date is sometimes taken to be that of the Mahābhārata War and the birth of Parīkṣit which almost synchronized with it; but none of the dynastic lists preserved in the Purāṇas warrants such high antiquity for these events, which have generally been placed roughly about 1200 to 900 B.C. The Aihole inscription of Pulakeśin II, however, accepts the early date as valid for the Great War and equates Śaka 556 (expired)—A.D. 634-635—with 3,735 years after the Bhārata battle (*Bhāratād āhavāt*). A Coḷa inscription from Grāmam (South

Arcot) is dated Kali year 4,044 or Kali day 14,77,037 corresponding to Saturday, January 14, A.D. 943. This era is still shown in the current almanacs, at least in South India. The *Saptarṣi* (also called *Laukika*) era begins after the expiry of 25 Kali years, in 3,076 B.C., and it was in use in Kashmīr and its neighbourhood at the time of Alberūnī (11th century A.D.) and generally in medieval times; it is recorded in cycles of one hundred years (often with the hundreds omitted), each cycle commencing seventy-six years after each Christian century.

Vikrama Era. The postulate of a Maurya era which played a part in discussions for some years is now seen to be a mistake due to the wrong interpretation of a passage in the Hāthīgumphā inscription of Khāravela. The earliest instance of a true Indian era we can be sure of is the Vikrama era which has persisted to the present day. The history of this era, however, is rather obscure and debatable. The name Vikrama comes to be associated with the era only from the 9th century of its currency, and the legends relating to king Vikramāditya, who overthrew the Śakas (*Śakāri*) at Ujjayinī and founded the era to commemorate the victory, are also very late. The Gupta emperor Candragupta II both defeated the Śakas and bore the title Vikramāditya; but he lived more than 400 years after the epoch of the Vikrama era. In the earliest records, which employ this era and which come from Western India, it is simply called *Samvat* or *Kṛta* (established) and is described some time later as the reckoning current among the Mālavas (*Mālavānām Gaṇasthiti*). Kielhorn has sought to connect the name of the era with an arrangement of the year of the Mālavas in four equal parts, by which the beginning of the autumnal equinox in the month of *Kārtika* (October-November) was the time for leading an expedition (*Vikrama Kāla*). In medieval times, however, the Vikrama year began in the bright half of *Caitra* (April-May) in the North, and in the dark half of the same month in the South. This era was most popular in North India. Some authorities hold that several Śaka and Pahlava inscriptions of the North-west must be referred to this era, and that it was founded by Azes, one of their early kings as seen from two inscriptions of A.D. 79 (Taxila silver scroll) and A.D. 77 (Kalawān) where we find *ayasa* and *ajasa* respectively added after the date. But this is by no means certain; and Sten Konow has rightly pointed out: "We have no example in ancient Indian inscriptions of the name of a ruler in the genitive being added to a date unless that ruler was actually reigning when the record was issued". Some still assign a foreign origin (Drangiana in East Īrān) to the era and ascribe its introduction into India to the Śakas. The era starts in 58 B.C., and to convert a current year in the era to the Christian era, one has to subtract 58 for the first nine and a half months (to the middle of *Pauṣa*) and 57 for the rest of the year.

Saka Era. The second great secular era, the Śaka era (A.D. 78), was

according to tradition founded by a Śaka king who occupied Ujjayinī 135 years after Vikramāditya. This era may well have been founded by Kaniṣka and was certainly in use in the 2nd century A.D. by the Śaka Satraps of Mālwa, Kāthiāwār and Gujarāt. According to this view the Kaniṣka era and Śaka era are different names for one and the same reckoning. But others prefer to ascribe the foundation of the Śaka era to Wima Kadphises or Kadphises II, place Kaniṣka in the 2nd century A.D., and accept a separate Kaniṣka era which was current for less than a century. The Śaka era has somehow become identified with the name Śālivāhana, obviously a corruption of Sātavāhana, and is now known in the South as *Śālivāhana-śakābda.* It is perhaps the most popular era in South India and is found employed extensively in inscriptions and literary works.

Kalacuri Era. Then we have an era of A.D. 248, first in use among the Ābhīras and Traikūṭakas, later taken over by the Cedis or Kalacuris and becoming better known by their name. This era was current in Central India down to the Muslim invasion. The epoch of this era was originally the first day of the bright half of *Kārtika* (September 25) in A.D. 249, in Gujarāt and Mahārāshtra. When it was introduced by the Kalacuris in North India, a mistake occurred as current years were erroneously supposed to be expired ones, and so the commencement of the era came to be antedated by one year and fixed at *Kārtika Sudi,* 1 (October 6) in A.D. 248. This is the conclusion reached by V.V. Mirashi in his work *Inscriptions of the Kalacuri-Cedi Era.*

Gupta Era. The Gupta era (A.D. 319–20) was probably founded by Candragupta I of the Imperial Gupta dynasty and was continued by the Maitrakas of Valabhī (Gujarāt) for some centuries after the fall of the Guptas in the 6th century A.D. The fixation of the epoch of the Gupta era by Fleet was a landmark in the progress of Indian historical studies that gave the Gupta dynasty its proper setting and brought order into several centuries of early Indian History.

Harsa and Other Eras. The Harṣa era (A.D. 606) founded by Harṣavardhana of Kānyakubja (Kannauj) was popular in North India for a couple of centuries after his demise. The existence of an era reckoned from the accession of Harṣa is alluded to by Alberūnī who read in the Kashmīrian calendar that Śrī-Harṣa was 664 years later than Vikramāditya (i.e. the Vikrama era). This fact agrees with the accounts of Hieun-Tsang which would indirectly put Harṣa's accession in A.D. 606. But Harṣa's name is not mentioned in any record attributed to this era. After Harṣa's demise, his erstwhile feudatories, the so-called Later Guptas, used this era. The latest date in this era seems to be that of the Pinjaur inscription year 563. Other eras of local or temporary importance were : the Lakṣmaṇa era (A.D. 1119) wrongly ascribed to King Lakṣmaṇasena of Bengal; Nevārī era of Nepāl which was started on October 20, A.D. 879,

according to Kielhorn; the Kollam era of Malabār (A.D. 825), the Cālukya-Vikrama era (A.D. 1075) of Cālukya Vikramāditya VI of Kalyāṇa (Deccan) and the San era which was probably introduced in Akbar's time and is current even today in Bengal. The Kollam era is still current on the West Coast and parts of the Tamil country and recorded in almanacs.

Hijra and other Eras. The Hijra era employed largely in Muslim chronicles and epigraphs, and the Christian era that came into current use with the advent of the European powers, call for no special remarks. The Ilāhī era (A.D. 1556) was started by Akbar.

Astronomical Data, and Synchronisms. The eras apart, inscriptions often furnish verifiable astronomical data which sometimes yield good results in the hands of competent scholars. The Indian historian has often to seek help from the writings of foreign travellers and annalists to gain a firm basis for his chronology. He also derives much assistance from significant synchronisms. The chronology of the Indus Civilization has been generally determined by the discovery in the Mesopotamian sites, particularly in the Sargonid period about 2350 B.C., of unmistakable Indus objects which provided an approximate date for a flourishing period of the Indus Civilization. But the treaty between the Hittites and the kings of Mitanni (*c.* 1400 B.C.) in which some Vedic gods are named has not led to decisive conclusions regarding Vedic chronology, because scholars differ on the question whether the forms of these divine names are proto-Īrānian or purely Indian (Vedic). Likewise, the astronomical argument from the precession of the equinoxes for a 4000 B.C. date for the *Ṛg-Veda* is rejected by some scholars who point out that the argument rests on two unproven and improbable assumptions, viz., that the Sun was brought into definite relation to the *Nakṣatras* and that the Vedic year started with the summer solstice.

Puranic Dynastic Lists. The dynastic lists in the Purāṇas have received more attention in the 20th century. It has been shown that the historical information they convey is not so untrustworthy as was formerly believed; for instance, the *Matsya* list of the Āndhra kings and the duration of the different reigns as given there, are now considered to be substantially correct. But often the fragments of history embedded in them have been torn away from their contexts, the lists of kings do not fit together cogently, and it is very difficult to evolve a consistent or continuous story out of them. It seems probable that the chain of evidence which might bring the Purāṇas into substantial agreement with the earlier Vedic tradition has been broken. Still the Purāṇic data are, when used with caution, of some help in the determination of relative chronology and the confirmation or correction of inferences from other sources of early Indian History.