

BHAVAII'S BOOK UNIVERSITY

HINDU CIVILIZATION PART I Radha Kumud Mookerji

GENERAL EDITORS

K. M. MUNSHI R. R. DIWAKAR

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IDYA

BHAVAN, BOMBAY

आ नो भद्राः ऋतवो यन्तु विश्वतः ।

Let noble thoughts come to us from every side. — Rigveda, I. 89. i

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HINDU CIVILIZATION

PART I

By

DR. RADHA KUMUD MOOKERJI

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BHAVAN'S BOOK UNIVERSITY

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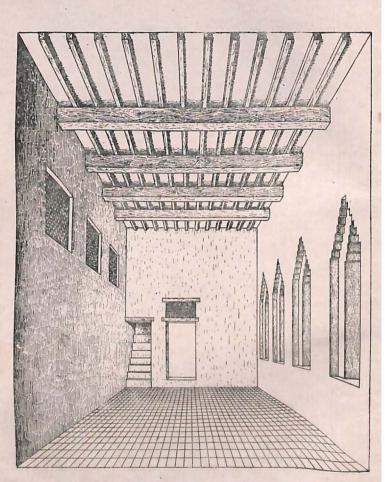
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Interior of Hall at Mohenjo-Daro (.c. 3250-2750 B. C.) Frontispiece]

BHAVAN'S BOOK UNIVERSITY

HINDU CIVILIZATION

BY

Dr. RADHA KUMUD MOOKERJI



1963

BHARATIYA VIDYA BHAVAN

CHAUPATTY, BOMBAY 7

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My Darling PRABUDDHA KUMUD MOOKERJI (June, 1920—September, 1931)

i

THE Bharatiya Vidya Bhavan—that Institute of Indian Culture in Bombay—needed a Book University, a series of books which, if read, would serve the purpose of providing higher education. Particular emphasis, however, was to be put on such literature as revealed the deeper impulsions of India. As a first step, it was decided to bring out in English 100 books, 50 of which were to be taken in hand almost at once. Each book was to contain from 200 to 250 pages and was to be priced at Rs. 2/-.

It is our intention to publish the books we select, not only in English, but also in the following Indian languages : Hindi, Bengali, Gujarati, Marathi, Tamil, Telugu, Kannada and Malayalam.

This scheme, involving the publication of 900 volumes, requires ample funds and an all-India organisation. The Bhavan is exerting its utmost to supply them.

The objectives for which the Bhavan stands are the reintegration of the Indian culture in the light of modern knowledge and to suit our present-day needs and the resuscitation of its fundamental values in their pristine vigour.

Let me make our goal more explicit :

We seek the dignity of man, which necessarily implies the creation of social conditions which would allow him freedom to evolve along the lines of his own temperament and capacities; we seek the harmony of individual efforts and social relations, not in any makeshift way, but within the frame-work of the Moral Order; we seek the creative art of life, by the alchemy of which human limitations are progressively transmuted, so that man may become the instrument of God, and is able to see Him in all and all in Him.

The world, we feel, is too much with us. Nothing would uplift or inspire us so much as the beauty and aspiration which such books can teach. In this series, therefore, the literature of India, ancient and modern, will be published in a form easily accessible to all. Books in other literatures of the world, if they illustrate the principles we stand for, will also be included.

This common pool of literature, it is hoped, will enable the reader, eastern or western, to understand and appreciate currents of world thought, as also the movements of the mind in India, which, though they flow through different linguistic channels, have a common urge and aspiration.

Fittingly, the Book University's first venture is the *Mahabharata*, summarised by one of the greatest living Indians, C. Rajagopalachari; the second work is on a section of it; the *Gita* by H. D. Divatia, an eminent jurist and a student of philosophy. Centuries ago, it was proclaimed of the *Mahabharata* : "What is not in it, is nowhere." After twenty-five centuries, we can use the same words about it. He who knows it not, knows not the heights and depths of the soul; he misses the trials and tragedy and the beauty and grandeur of life.

The Mahabharata is not a mere epic; it is a romance, telling the tale of heroic men and women and of some who were divine; it is a whole literature in itself, containing a code of life, a philosophy of social and ethical relations, and speculative thought on human problems that is hard to rival; but above all, it has for its core the *Gita*, which is, as the world is beginning to find out, the noblest of scriptures and the grandest of sagas in which the climax is reached in the wondrous Apocalypse in the Eleventh Canto.

Through such books alone the harmonies underlying true culture, I am convinced, will one day reconcile the disorders of modern life.

I thank all those who have helped to make this new branch of the Bhavan's activity successful.

K. M. MUNSHI

1, Queen Victoria Road, New Delhi, 3rd October, 1951 It is very gratifying to the author that a third edition of the work has been now called for. I am grateful to Bharatiya Vidya Bhavan, Bombay, for undertaking its publication in its well-known popular series called the Bhavan's Book University, with a view to giving it a wide circulation.

The work has been duly revised in its third edition with some changes called for by the recent division of the country and the emergence of India as a free and sovereign republic.

24, North Avenue, New Delhi

RADHA KUMUD MOOKERJI.

PUBLISHER'S NOTE

The book presents a history of Hindu Civilization from the earliest times to the period during which it achieved its final form and fruition. It is based on original sources, some of which have been brought to light for the first time and on the result of latest researches. A variety of original sources like the Vedas, the Epics, the Dharma-Sutras, the Shastras, the Smritis, Pali and Jain texts have been consulted. The reader will find a most fascinating account of India's pre-historic civilization, the diverse racial, linguistic and religious elements in her social and cultural composition, the geographical background shaping the country's history and the fundamental unity underlying the diversity physical and social. Accounts of the Vedic and Buddhist civilisations based on original texts and of the ancient Indian civilisation as found in Manu Smriti and Panini's grammar are also given. There is also a detailed survey of India's democratic tradition, institutions and republics.

The story is related by a reputed historian who has written a number of books dealing with the rich and varied annals of India's history.

The book was originally published in 1936 in London. The Bharatiya Vidya Bhavan re-published a De-luxe edition in 1950, The copies were sold out in record time.

At the suggestion of several friends, we are bringing out a popular edition of this book in two parts :---

Part I deals with pre-historic India up to the period of the post-Vedic literature.

Part II continues the story up to 325 B.C.

The author has revised the text for this edition in the context of the partition of India.

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CHAPTER I

INTRODUCTION

History as a Subject .-- History deals with the past of a people or country and not with its present or future. It deals with what has been, and not with what is, or what ought to be. It records realities, actual events, or accomplished facts, and has nothing to do with ideals, with which are concerned subjects like Ethics or Poetry, Art, and Literature. But though it deals with what may be regarded as the dead past, it is not without its lessons or value for the problems of the present or the prospects of the future. It supplies the data upon which are based the social sciences like Economics or Politics. Politics has even been defined as the fruit of the tree of which History is the root. All reform, whether social, economic, or political, must not be by a violent or complete break with the past, but should be along the lines of least resistance in consonance with the national traditions and aptitudes of the people concerned, as reflected in their history, if such reform is to take root and not to be flourished in the air.

Scope and Method.—The character of History as a subject of study determines the method proper for its study. As it records and recalls the past, it must do so faithfully like a mirror or a photograph, showing in its true contours and colours the object it brings before the ϵ_{ye} . In dealing with the events or facts of the past, it must first ascertain them correctly and let them speak for themselves. This means that history is entirely bound by its material. It cannot modify or improve upon it. A chemist can get the material he needs by means of artificial manipulations and experiments with which he proceeds to find positive or objective proofs of the hypothesis or theory suggested by his scientific and constructive imagination. But a historian must not manipulate his material. He must take the facts as he finds them. He cannot create them. The facts are external to him, and are beyond and independent of him. He cannot, like the philosopher, spin out of his inner consciousness an ideal system or, like the poet or artist, enthuse on "the light that never was on sea or land". He must be always true to his facts with all their imperfections in point of precision or definiteness, quality, reaction, effects, or consequences. History cannot be made to order. Its materials are beyond control. They are fixed with a dead certainty. When these are found, the historian must take a detached view of them.

Sometimes it is difficult to get at the correct facts of the past from the different accounts given of them in the sources or records from which they are derived. In such cases, the historian will require the critical spirit of a scientist in dealing with his material or the discrimination and impartiality of a judge in tracing the truth through a maze of conflicting and contradictory accounts and evidence. His views and judgments of the past must not be influenced by any personal bias or pre-conceived theories. He must accept as inevitable the conclusions to which the evidence leads, and bow to the picture of the past which his facts call up. That picture may, or may not, be to his taste, may be agreeable or painful, may feed or hurt his national price, but he must present it as it is. He must not touch up the picture. He must also place the picture in its proper setting. He must not interpret the past in terms of the present, or read into old texts modern notions.

Thus the ideal historian must possess the objective attitude of the scientist towards the facts and phenomena of his study, the mechanical precision and perfection of the mirror in reflecting and reproducing the past, the dialectical skill of the lawyer in sifting and interrogating the evidence, the impartiality of the judge in finding the way to truth through its different or conflicting accounts, and, lastly, the insight and vision which lead to the discovery and exploration of new sources of untrodden fields.¹

Limitations.—History is thus limited by, and to, the facts that are found. Some of them may be lost in oblivion. Much of the past is dead and buried; it can only be preserved if records are kept of it. Where there are no records kept of the facts and events of the past, there can be no history. History begins with recorded time. Besides the limitation of ascertained facts, history has thus the further limitation imposed upon its scope by the sources of such facts. The exploration of the sources is thus the first task of the historian. His second task is the extraction of facts from the sources.

¹Benedetto Croce has summed up the requirements of a historian in his own inimitable way. According to him, the his-torian must have "a point of view", "an intimate personal conviction regarding the conception of the facts which he has undertaken to relate. The historical work of art cannot be achieved among the confused and discordant mass of crude facts, save by means of this point of view, which makes it possible to carve a definite figure from that rough and incoherent mass.... It suffices to read any book of history to discover at once the point of view of the author, if he be a historian worthy of the name and know his own business. There exist liberal and reactionary, rationalist and catholic historians, who deal with political or social history.... Absolutely historical historians do not and cannot exist. Can it be said that Thucydides and Polybius, Livy and Tacitus, Machiavelli and Guicciardini, Giannone and Voltaire, were without moral and political views; and, in our time, Guizot or Thiers, Macaulay or Balbo, Ranke or Mommsen?....If the historian is to escape from this inevitable necessity of taking a side, he must become a political and scientific eunuch; and history is not the business of cunuchs ... Historians who profess to wish to interrogate the facts, without adding anything of their own to them, are not to be believed. This, at the most, is the result of ingenuousness and illusion on their part; they will always add what they have of personal. if they be truly historians, though it be without it, or they will believe that they have escaped doing so, only because they have referred to it by innuendo, which is the most insinuating and penetrative of methods." And yet this subjective element or factor, which is necessary and inevitable "in every narrative of human affairs", is "compatible with the utmost objectivity, impartiality, and scrupulosity in dealing with historical data and materials." (Aesthetic. pp. 220-3, in Ainslie's translation).

Treatment.-The treatment of the facts thus recovered will depend on their nature. Firstly, the sequence of facts may he traced in time, in the order of chronology. There is a view that history proper must be limited to chronology, that the facts and events of a distant or obscure past for which the precise dates are not available should be beyond the province of history. Such a limited view of history will make it merely political history made up of definite and concrete events and measures connected with the succeeding sovereigns of a country. But the sequence of facts may be traced not merely in time but also in ideas. Facts may be so arranged and presented as to exhibit the order of development, a process of organic evolution from origins and in successive stages. Or the facts may follow a logical order of ideal sequences and connections. By the application of both these methods, chronological and logical or philosophical, the horizon of history may be considerably widened. It will not be confined only to political history within the rigid limits of an immutable chronology, but will include much other matter of considerable interest and importance. It will include social history, the history of institutions, of culture and civilization, which is of more consequence to a people's national history and of more *abiding* value to the general culture of mankind than purely political, chronological history, treating only of particular and dated facts and events. For these form but a small and comparatively unimportant part of a people's history which should concern itself not so much with its rulers, government, or administration, as with its development in culture and civilization, and those formative forces, agencies, or movements which shape that development. It will be evident that for such history, the history of thought, of ideals and institutions, of manners customs, and beliefs, the merely datable facts, facts which are studied individually and piecemeal, do not count as much as they do for purely political history. For the history of civilization, of a nation's development through the ages in the different spheres of thought and action, facts are to be viewed in the mass, in their general and broader bearings and effects. in their tendencies, as comprising or exhibiting the stages or processes of that development.

Application to Indian History .-- Indian history based on chronology dates approximately from 600 B.C., the time of the great religious leader. Gautama the Buddha, whose date is the earliest date that can be ascertained with some degree of precision in Indian history. Yet, surely, the rise of Buddhism was not the first fact of Indian history. There was a long period of previous history and development of which Buddhism was a product. For this earlier history, it is not possible to trace any dates for the facts and movements that make it up. In reconstructing that history of the remote past, the chronological method breaks down. We have to fall back upon the other methods which will be very fruitful for the purpose. It the earlier pre-Buddhistic history of India is devoid of chronological data, it is rich in other kinds of data on the basis of which we can build up, instead of a political history presenting events in their chronological sequence in relation to sovereigns, a history of civilization presenting the broad movements in thought and morals, the evolution of institutions, the progress achieved through the ages in social organization. economic life, literature, and religion.

Sources.—All history, however, whether cultural ٥r chronological, is limited by its sources. The sources, or the evidence and records left of a people's life in the past, may be either in writing or in the form of material remains; they may be either literary or monumental in their character. There is an evolution of sources with the evolution of history. The carliest evidence of man's life was not in any written record or literary text, for writing, learning, or literature must come with considerable progress in civilization. According to many scholars, writing was not developed in India before about 800 B.C., though this view is not universally accepted. It is not, however, doubted that literature in India was much older than writing and was conserved and transmitted from teacher to pupil, from generation to generation, by a system of oral tradition. Texts in this Indian system of learning passed from ear to ear, and constituted what was technically called sruti (literally, what is revealed by *hearing*). All knowledge was thus stored up in the memory. The learned men were the travelling libraries of those days. This system of oral learning and teaching was valued highly in ancient India for its intrinsic

merits and efficiency as an educational method and continued in vogue long after writing was in common use. Some of the primary religious texts, like the Veda especially, are carefully treasured up in the heart for meditation, and considered to this day too sacred by devotees to be consigned for their conservation to external agencies like writing of books. But even granting that literature in India was older than writing and had lived long from mouth to mouth, it could not be the earliest source of Indian history. That has to be found in some of the material remains and vestiges left of the earliest life of man in India in what may be called the prehistoric ages. These are in the form of tools, implements, and traces of dwelling sites and habitations that were in use in those early days. Later, with progress in culture and civilization, the evidence of man's life grows in volume and variety till, in the historic periods, the sources of history are to be found not merely in literature, folklore, and tradition, out in such material remains of diverse kinds as works of architecture, sculpture, painting, inscriptions found on stone or copper, and coins conveying historical information in their marks, symbols, legends or writings, weight, or standard, fabric, and material. Thus history has to be built up on the basis of all these sources wherever available, literary, epigraphic, numismatic, and artistic or monumental. Some times these sources may have to be found far afield, even in foreign and distant countries. The history of countries with which India had intorcourse will throw light on her own history Some of the sources of Indian history are thus found in the writings of Greek and Roman authors. An inscription discovered in Mesopotamia throws light on the antiquity of the Rigveda, the earliest literary work of India and perhaps of the world. There are many old monuments in the islands of the Indian Archipelago such as Java, Sumatra, and Bali, or countries like Siam and Cambodia, comprising what has been conveniently called Indonesia, which owe their origin to Indian ideals and craftsmanship and throw light on the "expansion" of India, the growth of a Greater India beyond her boundaries.

CHAPTER II

PREHISTORIC INDIA

Geological Formations.-Prehistoric India is to be viewed both in its physical and human aspects. The geographical form of India, as we see it on the map, was not built up in a day. It is the outcome of a long course of geological evolution or earth-formation. Originally, the earth itself was one burning and moving mass like the sun, not showing on it any separate countries like India, nor supporting any life or organic form. Geologists distinguish four main ages of the earth, each with a number of sub-ages, with reference to life-development. These ages are: (1) Azoic, when there was no life on earth; (2) Palaeozoic, when life first appeared in the form of Invertebrates. such as sea-weeds, sponges, or jellyfish, and later, as fish, reptiles, and birds, together with gigantic trees and forests, the sources of our coal-seams; (3) Mesozoic (middle life); and (4) Cainzzoic (recent life), during which evolved different types of mammals out of which developed Man.

Life developed as the earth cooled and solidified into a Through earthquakes, volcanic eruptions, atmospheric crust. and climatic changes, the earth has attained to its present form. So also has India. She has been built up in parts and by stages. Some of her parts are very old, parts of the earth's earliest crust. She has a rocky foundation or backbone as old as creation, running right through from north to south. What is called Peninsular India, the Deccan as well as southern India, is also a chip of this old block, compared with which the plains of northern India are very recent. Peninsular India was at first a part of a different continent to which the name Gondwana is given by geologists. It extended from South Africa through Australia as far as South America, as shown by the identity of fossil remains, animal and vegetable, in all this area. The Western Ghats formed the watershed separating the eastern from the western part of Gondwana. That is why we find the rivers of Peninsular India flowing from sources in sight of

the Arabian Sea in the opposite direction till they fall into the Bay of Bengal. In the north, an extensive Eur-Asiatic Ocean called the Tethys engulfed the whole area from Central Europe through Asia Minor to northern India and Burma. In India, it was only the Aravallis that looked down upon this ocean. To the free migration in this ocean are to be traced the affinities found in the fossil contents of places so far apart as China, Central Himalayas, and Burma. After a long interval, the first tremors of mountain-building were felt. The Tethys retreated westward with its floor rising, and the lands on its opposite sides approaching each other. The soft deposits of the sea that separated them were folded and crushed to form the Himalayas in India.¹ the mountains of Persia, the Carpathians, and the Alps. The chief movement was that of Asia coming southward and driving the sea deposits against the stable block of India, namely, the northern part of Feninsular India, which bore the brunt of the shock, broke somewhat, and was involved in the folding. Traces of this folding are noticed by geologists in the central part of the Himalayas, including the highest peaks, and the foothills around Simla, just as the folded sediments of the sea are traced in the northern part of the Dehra-Dun-Simla-Spiti zone. There was also the simultaneous consequence of a subsidence of the land between the Himalayas and the Deccan plateau. The plains of northern India were formed ages later by the gradual filling up of this depression or sea with material washed down from the northern highlands. Even when India thus attained to her present geographical form and configuration, there had been a long interval before Man appeared in India to make her history. Human history began

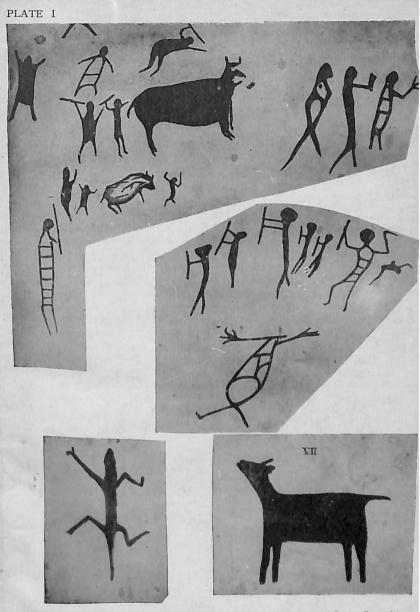
¹ The importance of the Himalayas to human history cannot be overstated. The growth of Man is itself traced to that momentous geological formation. Barell first suggested that Man and the Himalayas arose simultaneously, towards the end of the Miocene Period, over a million years ago. According to Sir Arthur Smith Woodward, "as the land rose, the temperature would be lowered, and some of the apes which had previously lived in the warm forest would be trapped to the north of the raised area." "As the forests shrank and gave place to plains, the ancestors of Man had to face living on the ground. If they had remained arboreal, or semiarboreal like the apes, there might never have been men" (Thomson and Geddes in Outlines of General Biology, vol. 2, p. 1164). long after the physical history of the country had accomplished itself, creating conditions calling for the advent of Man.

Prehistoric Cultures : Ages of Stone .-- The different stages in the early history of Man are marked by the different materials used by him for the satisfaction of his elementary needs. These materials are traced mainly in tools, weapons, pottery, and tombs. First were devised implements of stone, chipped and rude in form, usually found in association with fossils of animals now extinct. Thus the earliest period of civilization is called the Old Stone, or Palæolithic Age. Then came the New Stone, or Neolithic, Age, marked by the evolution of improved stone implements, ground, grooved, and polished, and usually associated with remains of fauna not extinct. It was further marked by the use of pottery, at first handmade, and later turned on the wheel, and by the practice of honouring the dead by giving them burial in tombs of massive stones. It will thus appear that a wide gulf and distance of time separated the two Stone Ages. The subsequent stages of development came on morc rapidly and imperceptibly-those characterized by the use of Copper. Bronze and Iron.

India, like other countries, has passed through these stages of development, except that she seems to have missed the Bronze Age (except in certain areas), instead of which she had something like the Copper Age.

Palæolithic remains are rather rare in India. They are mainly found in the Deccan and southern India, as being geologically the oldest parts of India. They are found in laterite beds and ossiferous gravels south of 25° north latitude, and made generally of quartzite, whence the Palæolithic men are sometimes called Quartzite men. Numerous quartzite implements have been found near Madras city and Ongole in Guntur district, and more in Cuddapah, which was the home of Palæolithic culture for its quartzite rocks, just as Bellary was the home of Neolithic culture. Isolated palæolithic remains have been found in a few other places. A well-made ovate instrument of chipped quartzite was found in the Narmadā valley in post-tertiary gravels containing the bones of hippopotamus and of other animals now extinct. An agate flake was found in similar gravels in the Godāvarī valley. The Kon ravines of Mirzapur have yielded some implements considered to be neolithic from their locality. A serrated fish-bone resembling an arrow-head was excavated in Gangetic alluvium in Ghazipur district below a stratum containing polished neolithic tools.

While the Palæolithians practically confined themselves to quartzite areas like Cuddapah or Madras coast, the Neolithians spread all over India. Their remains are broadly classified as follows: (1) "Pigmy Flints" or miniature stone implements varying in length from half to an inch and a half and shaped like arrow-heads, crescents, or jointed forms. These were apparently meant to be fitted into wooden holders and handles for a variety of uses. They were found in shoals in the Vindhya hills, in Baghelkand, Rewa, Mirzapur, generally on the floors of caves or rock-shelters, along with the ashes and charcoal of hearths or in tumuli, along with entire skeletons and rude pottery. A peculiar chisel-shaped, high-shouldered celt is found in Chota Nagpur, Assam, and more abundantly in Burma, Indo-China and the Malay Peninsula. (2) Implement Factories: Sites implement of and several neolithic settlements factories have been discovered in southern India. The implements seem to have been polished on gneiss rocks exhibiting grooves 10-14 inches long and about 2 inches deep. Highclass wheel-made pottery is also found in abundance at these settlements, together with stone beads and pieces of hæmatitc for manufacturing pigments. (3) "Cindermounds" found in the Bellary district of southern India. These are supposed to be the results of wholesale holocausts of animals and have yielded neolithic implements. (4) "Cup-marks" or sculpturings on stone and rock found in many places in India. (5) "Ruddle or hcematite drawings." These are found (a) in the Mirzapur district Vindhyan hills representing hunters with barbed spears attacking a rhinoceros, now extinct; (b) in caves in Hoshangabad district, representing a giraffe; (c) in the Kaimur hills, showing stag-liunts; and (d) at Singanpur, showing representations of an animal resembling a kangarco, and also of horse and deer, which are very like the Spanish drawings of the same age. These prehistoric paintings are found along with neolithic tools. (6) Tombs : while palæolithic men deserted their dead in the forests, the neolithics disposed of them by the more civilized practice



Examples of Neolithic Ruddle (Haematite) Drawings showing Stag. Crocodile, Boar, and Hunters (S. C. Roy's collection) [To face p. 10 of giving them burial. Neolithic sepulchres are, however, rarely found in India. The skeleton of an adult male was found with vessels of glazed pottery and glass in a grave in Mirzapur. A neolithic cemetery containing fifty-four tombs was discovered in the Kolar district, together with piles of pottery. At Pattavaram, near Madras city, have been found earthen mounds covering terra-cotta coffins, oblong for females and pyriform for males, who were buried in a contracted position. In other Madras districts, such as Chingleput, Nellore, and Arcot, similar oblong terra-cotta sarcophagi have been discovered, but sometimes associated with iron implements. Megalithic tombs in various forms occur throughout Madras, Bombay. Mysore, and the Nizam's Dominion, but are mostly post-neolithic for the iron implements they contain. They also show evidence of cremation. There was also the practice of Urn-burial in the neolithic age. The urns did not contain cremated ashes but whole bodies reduced in bulk by pounding or by dissection. A vast cemetery covering an area of about 114 acres, each acre accommodating about 1,000 urns buried underneath, has been found at Adichanallur, in Tirunelvelly district along the Tamraparni River. Parts of this necropolis must have been neolithic for the stone implements they contain, but much of it is recent for the implements of iron, ornaments of bronze and even of gold found. Examples of um-burial have been also found in Brahmanabad in Sind.

Copper Age.—The Age of Stone was followed by the Age of Iron in southern India but by an Age of Copper in northern India. There seems to have been no Bronze Age preceding the Iron Age in India, except in Sind, as will be seen later. Bronze is an alloy made up of nine parts of copper and one of tin. The many bronze objects brought to light in the archaic tombs of southern India are articles of luxury like bowls and regarded as later in date or as imports. The most important find of copper came from a village called Gungeria in Central India. It comprised 424 copper implements, very closely resembling Irish copper celts, considered to be as old as 2,000 B.C. The hoard also contained 102 silver plates comprising circular discs and figures of a bull's head with horns. This silver must have been rare in India and might have been even an import. But copper was indigenous to India and is taken to be the red *ayas* mentioned in the *Rigveda*. Besides the Gungeria hoard of copper implements, fine celts, harpoons, swords, and spear-heads of the same material have been found in the Cawnpore, Fatehgarh, Manipuri and Muttra districts, and indeed all over northern India, "almost from the Hooghly to the far side of the Indus, and from the foot of the Himalayas to the Cawnpore district".

Use of Iron.—Iron was used earlier in northern than in southern India, as it was used earlier in Babylonia than in Egypt. It is referred to in the *Atharvaveda*, which is not later than about 2500 B.C. Herodotus states that the Indian soldiers who fought in Europe under the Persian emperor, Xerxes, against Greece in 480 B.C. used iron-tipped cane arrows for their bows. Later, at the time of Alexander's campaigns in India, the Indians, according to the Greek writers, were as well versed in the use of iron and steel as the Greeks themselves. They further record that a present of 100 talents of steel was made to Alexander by some of the Punjab chiefs.

Beginnings of Civilization.—Civilization made its start in India in its north-western parts, in Baluchistan, Sind and Indus Valley which were then well watered, 'grew forests and also agricultural crops like wheat and barley with facilities for stock-breeding. There sprang up dozens of early small settlements of peasant communities who built up dams of stone with kiln-burnt bricks and though of the Stone Age they knew how to get copper and tin out of ores by heat and thus inaugurated the Bronze Age.

Some typical sites of this very early culture have been unearthed at places like (1) Quetta, (2) Amri-Nal-Nundara, (3) Kulli and (4) the Zhob Valley of Baluchistan. Each was known for its type of pottery. The Quetta-culture is marked by pottery of only one colour and geometric designs. Nundara has brought to light private houses with many rooms and also pottery with figures of animals, lions, fishes, birds like vulture, ox, as well as *pipal* tree. Nal also shows use of copper implements.



Remains of Indus Civilization (c. 3250-2750 B. C.): Drains at Mohenjo-Daro

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The Kulli culture shows in its pottery figurines of women and animals like humped cattle, goat and felines. A remarkable find is a copper mirror of 5" diameter of which the handle represents a female with breasts and arms but with the head to come from the reflection of the user of the mirror, an artistic device unknown to any old craftsmanship.

The Zhob culture of Rani Ghundai brings to light bones of animals, humped ox, sheep, ass and horse and also figurines of Mother Earth and phallus.

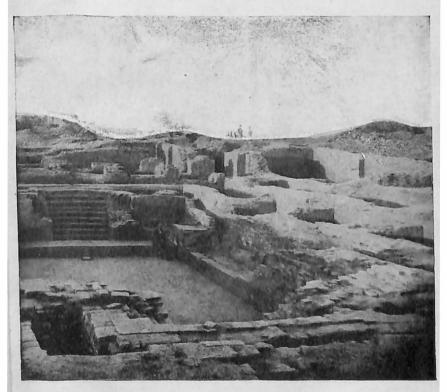
The Indus Civilization - c. 3250-2750 B.C. - While we have mere scraps of evidence scattered throughout India for these prehistoric cultures, recently quite a mass of conclusive and concentrated evidence has been unrearthed by archæological excavation in one region, that of the Indus, at two sites, viz. Harappa, between Lahore and Multan, and Mohenio-daro ("the Mound of the Dead") in the Larkana district of Sind. The evidence points to the development of an entire civilization which may be designated as the Indus Civilization in a region which was then more watered and wooded than now. Sind had in those early days a heavier rainfall, as indicated by the use of kiln-burnt bricks for the exposed parts of its ancient buildings, and of sun-dried bricks for its foundations and infillings protected against the elements; by the seals showing animals which were denizens of dense forests, or by the elaborate drainage system of its city. It was also then watered not merely by the Indus (with its affluents and branches) but also by a second river, the Great Mihran, which existed up to the fourteenth century A.D. These two rivers between them divided the vast volume of water from the five rivers of the Punjab and were mainly responsible for the growth of this most ancient civilization in Sind. Similarly, in the neighbouring region of southem Baluchistan, now desiccated, Sir Aurel Stein has discovered remains of large and prosperous prehistoric settlements. The prosperity of Sind continued up to the time of the Achæmenid emperor of Persia in the fifth century B.C. (under whom it was a satrapy), and of Alexander the Great, who saw it as the most flourishing part of India under its chief called Mousikanos (=Müshika or Muchukama?). The region was then even exposed to floods, as pointed to by the particularly solid basements and high terraces provided for the Mohenjo-daro buildings.

The surface of the Mohenjo-daro site is covered by mounds whose heights vary from 70 to 20 feet. Between the summits of these mounds and the level of the subsoil water have been uncarthed seven strata of remains, of which the first three belong to the Late Period, the next three to the Intermediate Period, and the seventh to the Early Period. Below the seventh, at a depth of about 40 feet from the surface, there must be earlier layers, now submerged beneath the subsoil water, for the layers already brought to light reveal a full-fledged civilization whose roots and origins must be traced to much older times, at least 1,000 years older.

Its remains: Buildings.—These were dwelling-houses, shrines, and public baths, for both secular and religious purposes.

The houses vary from the smallest ones of two rooms to a large one like a palace, showing a frontage of 85 feet and a depth of 97 feet, wide entrance hall and doorway, porter's lodge, courtyard 32 feet square, surrounded by chambers on both ground and upper floors, paved with brick and provided with a covered drain which was connected with vertical drains discharging into small earthenware vessels sunk beneath the courtyard pavement for purposes of the upstairs privies. There are unearthed some exceptionally large and elaborate structures which might have been temples. A hall of twenty brick piers, about 90 feet square, of the Intermediate Period, has also been found.

But the most singular structure is the Great Bath, a regular hydropathic establishment with several annexes. It consisted of (a) an open quadrangle with verandahs backed by galleries and rooms on all sides; (b) a swimming bath 30 feet by 23 by 8 feet (deep) in the middle of the quadrangle, with flights of steps at the ends; (c) wells from which the bath was filled; and (d) an upper storey of timber indicated by charcoal and ashes found. The construction of the swimming-bath reflects great credit on the engineering of those days. To make it watertight and its foundations secure, "the lining of the tank was made of finely dressed brick laid in gypsum mortar, about 4 feet thick; backing this was an inch-thick damp-proof course of PLATE III



Remains of Indus Civilization (c. 3250-2750 B. C.): The Great Bath

[To face p. 14

bitumen" further stabilized "by another thin wall of burnt brick behind it; then came a packing of crude brick and behind this against another solid rectangle of burnt brick encompassing the whole". That is how this tank, about 5,000 years old, is still so well preserved.

One of the accessories to this Great Bath is supposed to be a hammam or hot-air bath, showing traces of a series of dwarf walls supporting the floor and vertical flues for heating the room, "evidence of a hypocaustic system of heating."

Other Antiquities, $A\tau ts$, and Crafts.—The growth of these early cities depended on agriculture and trade. There are uncarthed specimens of wheat and barley¹ then cultivated, and of muller and saddle-quern by which they were ground, but not of the circular grindstone. Date palm was also cultivated, from the seeds found.

The *food* of the Indus people comprised beef, mutton, pork, and poultry, flesh of the ghariyāl, turtles, and tortoises, fish from the river or brought from the sea. The bones or shells of all these have been found among the ruins.

Skeletal remains testify to the following *animals* being then domesticated: the humped bull, buffalo, sheep, elephant, camel, pig, and fowl, and possibly dog (of which several terracotta figurines have been found) and horse.

Remains of the following wild animals have been found, viz. mongoose, shrew, black rat, and deer, and also figurines of bison, rhinoceros, tiger, monkey, bear, and hare.

Metals and Minerals.—There was use of gold and silver, of copper, tin, and lead, but iron was absolutely unknown. The gold used has been found to contain an alloy of silver known as electron, and must have come by trade from places like Kolar and Anantapur in the south, where such gold is found. Gold was used for making ornaments.

¹ Expert examination has revealed this *wheat* to be of the species still cultivated in the Punjab. It is not certain whether wheat or barley was the first cereal cultivated by man. Both have been found in the earliest graves of Egypt. The *barley* found at Mohenjo-daro is of the species found in pre-Dynastic graves in Egypt. It is believed that both wheat and barley are Asiatic in origin. (Cf. Peake's Presidential Address in J. R. Anthrop. Inst., 1927.)

The copper used along with lead must have come from Rajputana, Baluchistan, or Persia, where lead is found in association with copper ores. Copper had now taken the place of stone for manufacture of weapons, implements, and domestic utensils such as lance-heads, daggers, knives, axes, chisels, or ornaments like bangles, ear-rings, etc. Copper is found here in the earliest stratum, earlier than 3000 B.C. That it was extensively worked in India in very early times is proved by the find of 424 hammered copper implements at Gungeria already noticed.

Tin was not used by itself but as an alloy with copper so as to form bronze containing 6 to 13 per cent tin. Bronze was preferred to copper for producing sharp edges or finer finish. Being found in the ealiest stratum, it must have been in use before 3000 B.C. This disposes of the theory held that there was no Bronze Age in India at all. The sources of tin or bronze used in Sind must have been outside India, North Persia, and Western Afghanistan, from which they came by way of the Bolan Pass. The only Indian source was Hazaribagh district.

Various stones were used for building and other purposes and came from places far and near. The Sukkur limestone was used for covering drains. The Kirthar hills supplied gypsum used as a mortar and alabaster for making lattice screens, vessels, and statues. Harder stones of the neighbourhood, like gneiss and basalt, were used to make saddle-querns and mullers, door sockets. or weights. Chert was chipped and ground into weights and polishers, or flaked for use as knives. Steatite was used in the making of seals and statuettes. The yellow Jaisalmir stone is the material found in statues and cult objects like lingas and yoni rings. Many varieties of semiprecious stones were used for beads and ornaments, such as rock crystal, hæmatite, carnelian, jasper, agate, or onyx. The fine green amazon stone came from Doddabetta in the Nilgiris as its only source in India, and amethyst from the Deccan trap. Lapis lazuli came from Badakshan, turquoise from Khorasan, and jadeite (hard jade) from the Pamirs, Eastern Turkestan, or Tibet

Other materials were also used such as bone, ivory, shell, or faience. Shell came from the coasts of India, and Persian Gulf or the Red Sea.

Numerous spindle-whorls found in the houses of Mohenjodaro testify to the common practice of *spinning* and that among the rich and poor alike, as shown by costly whorls of faience and cheaper ones of pottery or shell. The material for textiles was both *wool* and *cotton*. Scraps of cotton found adhering to the side of a silver vase have been found by expert examination to resemble the present-day coarse Indian cottons with its typical convoluted structure. Thus this indigenous Indian cotton was known to the Babylonians as *sindhu* and to the Greeks as *sindon*, and was a true cotton and not a product of the cotton-tree as hitherto believed.

The *dress* of the days included a long shawl as shown in two statues found. The men wore short beards and whiskers, with upper lip sometimes shaven as in Sumer. The hair was taken back from the forehead and then clipped or coiled in a knot with a fillet to support it at the back of the head. Sometimes there is seen a skull-cap curling into a point behind, or a taller cap with a rolled brim. Three bronze figures of dancing girls show the hair coiled in a heavy mass taken above the left ear to fall over the right shoulder.

Ornaments included chiefly necklaces, fillets, armlets, and finger-rings for both sexes, and girdles, ear-rings, and anklets. For the rich these were of gold, silver, faience, ivory, or semiprecious stones; for the poor, shell, bone, copper, and terracotta. Carnelian was skilfully bored to form beads for girdles.

That the Indus civilization was of the Chalcolithic Age is shown by the fact that *arms* and *utensils* of stone were used side by side with those of copper or bronze. The weapons of war and the chase are bow and arrow, spear, axe, dagger, and mace, but the sword was not yet evolved, nor defensive bodily armour. Among the other implements may be mentioned hatchets, sickles, saws, chisels, and razors, made of both copper and bronze; knives and celts of these metals, as also of chert or other hard stones. Some stone objects like dishes, bowls, vases, toilet-boxes, palettes, burnishers, or weights have, however, left far behind the typical artefacts of a Stone or Chalcolithic Age. Judging from the paucity of finds of offensive and defensive weapons, it may be held that the people of Mohenjo-darowere not very military or much troubled by fears of invasion.

The Indus *weights* are interesting. The small ones are cubes of chert or slate, the larger ones conical in form. The weights show "greater accuracy and consistency than those of Elam and Mesopotamia". The sequence of their ratios was at first binary like that of the Susa weights, but later decimal, viz. 1, 12, 4, 8, 16, 32, 64, 160, 200, 320, 640, 1,600, the weight most in use was the ratio 16, weighing 13.71 gm.

Domestic vessels were generally of earthenware of various kinds and shapes, offering stands, goblets, heaters, store-jars, and the like. Vast numbers found of goblets or drinking cups show the Indus practice, still the Hindu practice, of throwing away the cups once used for drinking.

The Indus pottery was generally wheel-made and was painted red-and-black ware. Some of it was also "incised", "polychrome", and "glazed". The "glazed" Indus pottery is "the earliest example of its kind in the ancient world", and that, too, as a fine fabric. It appeared in Mesopotamia about 1000 B.C. and much later in Egypt.

Terra-cotta *loys* were produced in great variety, such as rattles, whistles (shaped like birds), figures of men, women, birds, and carts. Birds were mounted on wheels and oxen yoked to carts. The carts are the earliest known specimens of their kind, like the chariot figured on a stone slab at Ur (dated 3200 B.C. by Woolley).

The Indus people had invented *Writing*, for which they employed a script which belongs to the same order as other quasi-pictographic scripts of the period, such as the Proto-Elamitic, Early Sumerian, Minoan, or Egyptian. There are found 396 Signs of the script, accompanied by inscriptions on seals, scalings, pottery fragments, copper tablets, and even bangles of vitrified clay. *Signs* are also found in combination, while characters are modified by the addition of accents, or strokes. There are also seen groups of strokes, never exceeding twelve in number, which have perhaps a phonetic rather than a numerical value. The direction of the writing is seen generally to be from right to left, except for continuation The large number of Signs again rather shows that the script was not an alphabetic one but phonetic.

The remains and antiquities show that lack of ornament in which $a\tau t$ originates. But the smaller objects, like *seals* and *amulets*, show some art. The humped bull, buffalo, or bison engraved on seals may be taken as examples, as also the powerfully modelled young bull of terra-cotta, a mastiff-like hound in steatite, seated ram, squirrel, or monkey, figured on amulets. There is here realism tempered with restraint.

Examples of artistic human form are not numerous, the many terra-cotta figurines hardly showing any art. Of stone images, few as they are, three are worthy of mention. One is that of a Yogi with meditative eves fixed on the tip of the nose. Another is a portrait head showing prominent checkbones, wide, thin-lipped mouth, but ugly saucer-like ears. There is a third seated image showing a shawl worn. We may also note in this connection the bronze figurine of a dancing girl, showing disproportionately long arms and legs and beating time to music with her feet. There are two remarkable statuettes found at Harappa, one of which, of red stone, imported from a distance, shows faithful modelling of fleshy parts. and the other of dark grey slate, the figure of a male dancer. standing on his right leg, with the left leg raised high, the ancestor of Siva Nataraja. Both these statuettes anticipate Greek artistry by their striking anatomical truth, just as the scals already referred to anticipate the Greek delineation of animal forms.

Religion.—The data discovered so far both at Mohenjodaro and Harappa are meagre.

A large number of female figurines of terra-cotta has been discovered, akin to those discovered in Baluchistan, though these latter are not full-length images.

Female statuettes akin to these from the Indus Valley and Baluchistan are also found in large numbers in countries of Western Asia and around the Ægean coasts, in Elam, Mesopotamia, Transcaspia, Asia Minor, Syria, Palestine, Cyprus. Crete, the Cyclades, the Balkans, and Egypt. The accepted view is that these are representations of the Great Mother-or Nature-Goddess. It is in keeping with the religious tradition of India, the home of worship, from time immemorial, of the divine Mother, $\bar{A}dy\bar{a}$ -Sakti or Prakriti, the Prithvi [Rv. vi, 12. 5; x, 187, 2,] or Prithivi [Rv. v. 85, 1-5; vii, 7, 2-5], or Aditi, the mother of the Adityas of the Rigveda, down to the Grāmadevatās or village goddesses of modern times, figuring as the national deities of the masses of India, Aryan or non-Aryan.

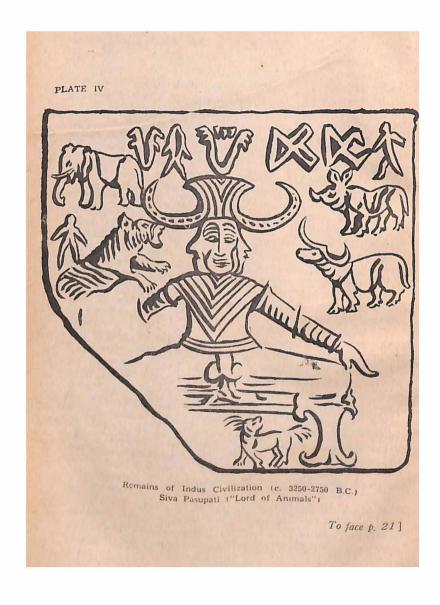
A striking oblong sealing found at Harappa represents the Earth or Mother Goddess, with a plant growing from her womb, and a man, knife in hand, and a woman with raised hands, who was probably to be sacrificed.

A male deity, "the prototype of the historic Siva," is portrayed on a seal with three faces and eyes (the trimukha and trinayana of Siva), seated on a low Indian throne in the typical posture of a Yogī, with animals on each side, elephant and tiger on right and rhinoceros and buffalo on left, and two horned deer standing under the throne, justifying the title of Rigvedic Rudra and of Siva as Paśupati, Lord of Animals. The deer indicative of the forest anticipate the Buddhist sculptures representing the deer-park where the Buddha had deliverted his first sermon. There is also the last characteristic of the historic Siva in this figure, a pair of horns crowning his head to denote the deity and anticipating the triśūla or trident of the Saivas, or the triratna, the three jewels of the Buddhists.

It is to be noted that a deity in the same posture of a $Yog\bar{i}$, with a Nāga kneeling in prayer to him with uplifted hands on either side of him, is also found portrayed on a faience scaling from Mohenjo-daro, while another scal portrays the deity in the same posture but with only one face. A reference has also already been made to the stone portrait head of a $Yog\bar{i}$ with the eyes fixed on the tip of the nose.

Mr. N. P. Chanda (in the *Modern Review* for August. 1932) takes the standing four-armed figure occurring among the Signs of the Indus script (e.g. No. 383 of the Sign Manual) to be that of a deity and indicating that four-armed deities were included in the Indus pantheon, anticipating the later four-armed Hindu gods like Brahmā, Vishnu, or Siva.

He also points to the figures of standing deities on some six scals [Plate xii and Plate cxviii, fig. 7 of Sir John Marshall's work on Mohenjo-daro] of Mohenjo-daro as those of deities in the posture of yoga known as Kāyotsarga, a stand-



ing posture peculiar to the Jain Yogīs as illustrated, for instance, in the famous statue of Jina Rishabhava of about second century A.D., on view at Muttra Musēum. The name *Rishabha* itself means the bull, which is also the emblem of the Jina. It is curious that seals numbered (f), (g), (h) of Plate ii [Ib.], also show a standing deity with a bull in the foreground. Can it be the forerunner of *Rishabha*? If so Jainism also, along with Saivism, must take its place as one of the oldest religions of Chalcolithic origins, thus helping over the hiatus between the Indus and subsequent Indian civilizations as phases in a common cultural evolution.

Along with this worship of Sakti and Siva was also that of $ling\omega$ and yoni, as evidenced in the realistically modelled and unmistakable figures in stone of both found in the Indus Valley and Baluchistan, together with numerous ring-stones. Indeed, three types of cult stones are brought to light at Mohenjo-daro and Harappa, the boetylic, the phallic, and the yoni ring-stones, of which the smaller specimens carried and worm as amulets are more numerous than the larger ones which were objects of worship. Some smaller specimens probably served as gamesmen.

There is also evidence found of tree-worship in two forms. One was the worship of the tree in its natural form,, as illustrated in certain sealings from Harappa. In the other case, what was worshipped was not the tree but its indwelling spirit. A most remarkable seal found at Mohenjo-daro represents the deity, a standing nude figure, between two branches of a tree, showing it to be the pipal-tree (ficus religiosa) made famous as the Bodhi-tree, the Tree of Knowledge of the Buddha. The worship of the deity is indicated by a line of seven figures with plaits of hair falling down the back, indicating that these were female officiants or ministrants of the goddess, and also by the figure of a half-kneeling suppliant with long hair, behind whom is a composite animal, part bull, part goat, with human face. perhaps the vahana or vehicle of the goddess of the pipal-tree There are found a few other seals, one showing a tree springing from the jugate heads of two unicorns, others (from Harappa) showing a goat or other horned animal, along with the deity and her suppliant. The continuance of this religious tradition is found in the sculptures of Bharhut and Sanchi showing the Yakshis as Dryads but in subordinate place in the pantheon.

Evidence of Zooletry (animal worship) is also found at Mohenjo-daro in the animals represented on seals and sealings, or in terra-cotta, faience, and stone figurines. Firstly, there are represented mythical and composite creatures; e.g. human-faced goat just described, or features which are part ram or goat, part bull and part elephant, three-headed chimeras, semi-human semibovine creature attacking a horned tiger (closely resembling the Sumerian Eabani or Enkidu of the fourth millennium B.C.), use of horns for deities, and Nagas. Secondly, there are represented creatures not completely mythical, such as unicorns and two-horned beasts, accompanied with incense-burners or animals figuring as officiant genii. Thirdly, there are represented the real, natural animals, such as (1) the water buffalo, (2) the gaur or Indian bison, (3) the Indian humped bull or zebu, (4) the Indian rhinoceros, (5) a short-horned humpless bull, (6) the tiger, and (7) the Indian elephant. Some of them, especially the tigor, rhino, and bison, are shown as feeding from troughs, indicative of food-offerings to beasts deified, which could not be domesticated beasts. Lastly, there are the figurines and engravings of other animals and birds, ram, pig, dog, monkey, bear, hare, squirrel, parrot and other birds of which some were toys, but some sacred, such as sheep and ram, exquisitely modelled in faience for use as amulets; as also squirrels and the mastifl similarly modelled. Some of these animals still figure as the vehicles of Hindu deities, e.g. the bull of Siva, the lion of Durga, the buffalo of Yama, the ram of Brahma, the elephant of Indra, the monkey worshipped as Hanuman, or the wild boar of Gauri.

Lastly, purification by bath or ceremonial ablutions formed a feature of this religion. This explains the elaborate bathing arrangements marking the city of Mohenjo-daro and distinguishing it from all other cities of antiquity.

Summary.—Thus the religion of the Indus people comprised: (1) the worship of the Mother Goddess or Sakti; (2) the worship of a male deity, the ancestor of Siva; (3) worship of animals, natural, semi-human, or fabulous; (4) worship of trees in their natural state or of their indwelling spirits; (5) worship of inanimate stores or other objects, of linga and yoni

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symbols; (6) Chrematheism as illustrated in the worship of the sacred "incense-burners"; (7) faith in amulets and charms indicative of *demonophobia*: and (8) practice of *Yoga*. It will be seen from these characteristics that this religion, in spite of a few foreign elements already noticed, was mainly an indigenous growth and "the lineal progenitor of Hinduism", which is still marked by some of these features, the cults of Sakti and Siva, of the Nāgas, of Animal-, Tree-, and Stone-worship, of Phallism and *Yoga*.

Disposal of the dead.-The Indus people disposed of their dead by cremation. This is proved by the discovery of many cinerary urns, or other receptacles, containing calcined human bones and ashes, together with vessels of burnt and other offerings and sundry articles for use of the dead in after-life. Other urns are also discovered containing vessels for offerings and other articles for the dead, but not any human bones, probably because the calcined bones which remained over after cremation were ground to powder and cast off, as is still done in the Puniab Sir Aurel Stein has also discovered many such cinerary and cenotaphic urns at different sites in Baluchistan. Cases of burial, whether fractional (where only a fraction of the bones was collected and buried after the body had been exposed to beasts and birds) or complete, were rare. Examples of complete burial are found in twenty-one skeletons discovered at Mohenjo-daro, seven in public streets and the rest in a room, betokening three distinct racial types, proto-Australoid, Mediterranean, and Alpine. The layers in which the skeletons were found show that the burials belonged to the age of the dccline of Mohenjo-daro. A few examples of complete burial are also found at Harappa and in Baluchistan, but these are later in time.

Extent.—The antiquities unearthed at the two sites of Mohenjo-daro and Harappa point to a common and uniform civilization that had already struck its roots deeply throughout Sind and Punjab. Quite a number of other sites has also been discovered in these regions belonging to the Chalcolithic Age. There is also an earlier stratum of culture traced in Sind in numerous Neolithic artefacts, such as cairns, burrows, and other rough stone structures, together with flint flakes and cores, mostly found among the Rohri and Kirthar hills. Thus, Mohenjo-daro was preceded by Neolithic culture in Sind.

Origins and Affiliations.—The development of this Indus civilization was part of a larger movement which manifested itself in the growth of similar early civilizations along the broad Afrasian belt up to Western Persia and Mosopotamia, in the Chalcolithic Age, as the offspring of the great rivers, the Nile in Egypt, the Euphrates and the Tigris in Mesopotamia, the Karun and the Karkheh in Western Persia, and the Helmand in Seistan. It is, therefore, not at all surprising if the richer and broader river valleys of Sind and Punjab also became the seats of an early civilization, or if further exploration reveals proofs of its extension even in the more promising valleys of the Jumna and Ganges.

These several Civilizations are marked by individual peculiaritics, as well as certain common elements. For instance, each country devised its own Signs to record its speech. The hieroglyphs of Egypt differ from those of Crete, the Cretan from the Sumerian, the Sumerian from the Elamite, and so on. But though the scripts differ, they are based on a common idea. that of using pictured Signs to record not only objects or concepts, but actual sounds. A similar example is found in spinning and weaving. The Indus people used cotton whereas flax was used on the Nile. But the art of spinning and weaving was known in both regions as the common property of the then civilized world. The same remark applies to painted pottery. Each region had its own designs and shapes for its ceramic wares, but the potter's wheel and the art of fixing the colouring on the vessels by firing were common knowledge. In spite, however, of these common ideas and inventions, the Indus civilization is as distinctly individual and national as any of the other great and contemporary river civilizations.

These specifically Indian features of the Indus civilization have been already indicated and may be summed up here. They comprise (1) the use of cotton for textiles not known to the Western world until two or three thousand years later; (2) a higher standard of urban life and amenities, as seen in the commodious houses, baths, wells, and systems of drainage meant for the ordinary citizens, and not known in prehistoric Egypt or Mesopotamia or any other country in Western Asia, where architecture is chiefly aristocratic, being marked by magnificent palaces, temples, and tombs, without spending much thought on the dwellings of the poor or the masses; (3) a high level of achievement in glyptic art, as illustrated in the faience models or the intaglio engravings on seals of animals like bulls, or in the exquisitely supple modelling of human statuettes already noticed; and (4) religion, which is easily seen as the ancestor of modern Hinduism in its several features already described.

Age.—The age of the Indus civilization is inferred from certain general resemblances, already noticed, between it and the other early civilizations of known dates, the proto-historic civilization of Sumer, and the later prediluvian civilizations of Elam and Mesopotamia. Certain specific resemblances are also disclosed in a variety of objects recovered from the Indus, Elamite, and Mesopotamian sites, and these cannot be explained away except as the outcome of active intercourse between these regions at the close of the fourth millennium B.C.

The most important of these objects are *Five Seals* bearing the unmistakable "Indus" pattern (the script and humped bull), which were discovered at different sites in Elam and Mesopotamia. Of these, two found at Ur and Kish are definitely assigned to the pre-Sargonid Period, i.e. to an age before 2800 B.C., although similar seals have been found in even earlier layers at Mohenjo-daro. If a period of 500 years is allowed for the seven different layers of remains at Mohenjo-daro as being subject to a speedier process of decay and renewal due to frequent inundations, the period of its civilization may be rightly placed between 3250-2750 B.C., allowing for still earlier times for its previous history and origins.

Besides Seals, are found several other objects and *motifs* betokening an intimate contact between these civilizations. Of these, the most noteworthy are (1) certain fragments of vasce of Indian potstone found at Al-Ubaid; (2) the trefoil patterning on the robe of the Yogi's statuette already noticed, which is supposed to be Sumerian; (3) horned figures on seals identified with the Sumerian hero-god Eabani; (4) etched beads of carnelian showing the identical technique of beads from pre-Sargonid graves at Kish; (5) types or shapes of jars, offerings-stands.

stone-weights, etc., and so forth.¹ The painted pottery of Mohenjo-daro, from the general style of its decoration, is assigned by Mr. Ernest Mackay to a later period than that of Susa I (c. 4250 B.C.) or even Susa II (c. 4000 B.C.), to the period c. 3250-2750 B.C., to which is also to be assigned the painted pottery of Baluchistan, as discovered by Sir Aurel Stein.

Recently (1932), Mr. Woolley has discovered at Ur another Indian scal in a tomb-shaft ascribed by him to the Second Dynasty and dated at about 2800 B.C. But he himself doubts its date and importance, as it was an isolated object found in the filling of a tomb. A similar chronological uncertainty attaches to the five other seals mentioned above.

We are, however, on more definite ground in respect of certain objects discovered by the Iraq Expedition of the Chicago Oriental Institute in a well-defined archælogical stratum at Tell Asmar (ancient Eshnunna) in the desert near Baghdad. On the very surface of this site were found cylinder seals, pots, and tablets of the reign of Sargon of Akkad (about 2500 B.C.), one seal impression actually mentioning Shu-dur-ul, the last king of that dynasty. There were also found some definitely Indian objects, indubitable importations from the Indus Valley of which the civilization can thus be dated without doubt. A seal is found, depicting the animals, elephant, and rhinoceros, foreign to Babylonia, and marked by the Indus convention by which the feet and ears and the folds in the elephant's skin are represented, and also in the peculiar rendering of the ears of the rhinoceros. We may recall in this connection the Mohenjo-daro seal showing a procession of animals in which the elephant and rhinoceros are placed side by side. Thus there cannot be any doubt that this particular seal was imported from the Indus Valley and reached Eshnunna about 2500 B.C. Other similarly Indian objects found at this new site include square stamp seals with pierced knobs on the back and bearing a design of concentric squares not found in Mesopotamia but common at

¹ A writer in *JRAS.*, 1931, pp. 593-6, points out three links of connection between India and Mesopotamia. viz. script, painted ware, and rectangular brick. Of these, the Indian script on introduction was abandoned in favour of the indigenous Sumerian script, while after 3500 B.C. the Indian rectangular brick also disappears, being replaced by the clumsy plano-convex brick.

Mchenjo-daro; beads of etched carnelian definitely Indian, introduced among the ordinary Akkadian beads of necklaces; or kidney-shaped inlays of bone identical in shape with some in shell from Mohenjo-daro and not found in Mesopotamia.

Excavations at this Baghdad site have brought to light remains of five successive periods, viz. (1) Larsa Period (2186-1931 B.C.), (2) post-Sargonid Period of invading mountaineers, (3) and (4) Sargonid Period traced in inscribed tablets and seals, and (5) the earliest period marked by houses built of plano-convex bricks contemporary with the tombs of Ur. Thus the Ur finds are earlier than the Baghdad finds by 1,000 years, according to Mr. Woolley, i.e. of about 3500 B.C. In that case, Babylonia gains priority over Egypt, where the early dynastic period is not older than 3000 B.C. This view will also antedate further the Indus civilization.

Finally, it is to be noted that these Indian objects found in houses in Eshnunna of the time of Sargon (as definitely stated in inscriptions) do not bear the same close resemblance to the Mohenjo-daro finds as the six seals mentioned above. There may be chronological or geographical reasons for this difference. The seals from the Baghdad site may belong to a later or earlier stage of Indus civilization than those found at Mohenjo-daro; or they might have come from some other site of the same civilization. Perhaps the second assumption is nearer the truth. At any rate, the Mohenjo-daro phase of this early Indus civilization is not its only or earliest phase, as already shown (Dr. H. Frankfort, Field Director of Iraq Excavations, in a letter dated 5th March, 1932, to *The Times*.)

Authors.—Who were the authors of this civilization? The human remains found at Mohenjo-daro bring to light four ethnic types, viz., the Proto-Australoid,¹ Mediterranean,² Mongolian branch of the Alpine and the Alpine.³ The Proto-Australoids must have come from the Indian sub-continent, the Mediterranean from along the southern shores of Asia, the Alpines and the Mongoloid Alpines from Western and Eastern

1 Now represented by the Kols, Bhils, etc.

2 As seen in the modern long-headed Hindusthanis.

3 Represented in the modern broad-headed Gujaratis, Marathas, Bengalis.

Asia respectively. Thus the population of Sind was already cosmopolitan in that early age. The evidence of skulls is also confirmed by that of sculptures. The sculptured heads and figures unearthed at Mohenjo-daro point to the blending of diverse racial types. But all this evidence is to be treated with caution. After all, the artists were not anthropologists, and were not out to produce faithful transcripts of the originals, the exact shapes of heads. The number of skulls found is also too small to warrant a safe generalization regarding the composition of the civic population at Mohenjo-daro. Harappa also has brought to light but a few skulls, of which only three have so far been examined by experts. The entire skeletal material from both the places is thus too scanty.

The next question that may be raised is, Were the Indus people Dravidians, in view of the theory held that the Sumerians with whom they had such intimate relations are believed to belong to the same ethnic type as the Dravidians? The presence of the Dravidians up in these northern regions in remote ages is also proved by the language of the Brahuis of Baluchistan. But the difficulty of the problem is that it is not possible precisely to define either the Sumerian or the Dravidian type, as they are themselves mixed types. Thus even if the Dravidians had come from the West to India as invaders, their original racial type was transformed by their intermarriage with the aboriginal Indians, the Proto-Australoids. Again, if they are considered as being native to India, they must have been originally Proto-Australoids and acquired their Dravidian character in course of natural evolution and by intermingling with foreign elements. In either case, whether they came from West to East or East to West, the few skulls examined at Mohenjodaro cannot be identified as Sumerian or Dravidian.

Links with Vedic Civilization.—Lastly, there is the question as to whether the Indus people and their culture were known to India's earliest literary record, the *Rigveda* or whether the Indus culture had preceded or followed the Vedic culture, and that, as its ancestor, or descendant.

A study of Rigvedic India is to follow later. A critical consideration of the evidence of the *Rigveda* will lead to the conclusion that the references it contains to the non-Aryans

and their civilization may be taken to refer to the Indus people. As will be explained later, the antiquity of the *Rigveda* itself is now established by certain inscriptions of the Hittite capital of the fifteenth century B.C. invoking specifically Rigvedic deities, so that the *Rigveda* itself must have originated earlier to have its culture migrate from India to Mesopotamia in that early age; while a proper view of the evolution of Sanskrit Language and Literature antecedent to the rise of Buddhism in about sixth century B.C. cannot place the *Rigveda* later than about 2500 B.C., when it was also already a finished product. Considering these chronological probabilities, Professor Langdon has concluded that "it is far more likely that the Aryans in India are the oldest representatives of the Indo-Germanic race". He is further confirmed in this view by his belief that the Brāhmi script itself derives from the Indus script.

Regarding the non-Arvan or the aboriginal peoples of India. the Rigveda shows considerable acquaintance. It calls the non-Arvan as Dāsa, Dasvu, or Asura and in one passage [I, 133, 4] refers to "ruddy" Piśāchas and Rākshasas uttering fearful noise and yells in battle. It also mentions the names of individual non-Arvan leaders and peoples [cf. references given later]. It mentions some significant characteristics of non-Arvan culture which recall and resemble those of the Indus. Thus the non-Aryan is described as speaking a strange language (*mridhravāk*), not following Vedic rituals (akarman), gods (adevayu), sacrifices devotion (*abrahman*). (avaivan), or ordinances (avrata), but following their own system (anvavrata), And besides these negative characterizations, the Rigveda also mentions a positive characteristic of the non-Arvan, viz, that he was a phallus-worshipper (*sisnadevah*) [vii, 21, 5; x, 99, 3].

There is thus nothing in this Rigvedic description of non-Aryan culture which goes against its identification with the Indus culture. We have already seen how the religion of the Indus people was characterized by the worship of the phallus, while their language, not read and understood to this day, very well deserved the description given to it by the *Rigveda*, viz. that it was radically different from Sanskrit.

As regards the material aspects of non-Aryan civilization, the *Rigveda* refers to towns and forts, broad $(prithv\bar{\imath})$ and wide $(urv\bar{\imath})$, full of kine $(gomat\bar{\imath})$, of 100 pillars $(satabhuj\bar{\imath})$. built of stone (asimamayi), to autumnal (saradi) forts as refuge against inundations, and to hundred cities in a non-Aryan kingdom. Even the Vedic god Indra is designated for the occasion as Purandara, "sacker of cities"! Does not all this seem appropriate reference to the city civilization of the Indus valley? The *Rigveda* again knows of a mercantile people it calls *Paņis* and refers to the Vedic peoples, Turvasa and Yadu, as hailing from the sea.

Some of the Mohenjo-daro skulls are, again, found to be Proto-Australoid, while this particular aboriginal population the *Rigveda* describes as *cnāsa*, "snub-nosed," and "a dusky brood" (*krishna-garbha*).

Most of the animals known to the Indus people are also known to the *Rigveda*, such as sheep, dogs, or bulls [iv, 15, 6; vii, 22, 2; vii, 55, 3]. The animals hunted by the Rigvedic people were antelopes [x, 39, 8], boars [x, 86, 4], buffalos (gaura) [x, 51, 6], lions [x, 28, 10] and elephants [viii, 2, 6], and these are also familiar to the Indus people. Horses, however, were domesticated in Rigvedic India, but not so much in the Indus Valley.

As regards metals, the *Rigveda* knows ornaments of gold (*hiranya*) [i, 122, 2]. These gold ornaments comprised carrings, necklaces, bracelets, anklets and garlands [*karnaśobhana*, vii, 78, 3; *nishka grīva*, ii, 33, 10; *khādi*, i, 166, 9, and v, 54, 11; *nukma-vaksha*] and jewels for the neck [*mani-grīva*, i, 122, 14]. We have seen how most of these ornaments were also in use in the city of Mohenjo-daro.

Besides gold, the *Rigveda* knows of another metal called ayas, of which vessels were made [ayasmaya, v, 30, 15]. This metal was also hammered [ayo-hata, ix, 1, 2]. It is probable that the ayas of *Rigveda* means copper. In the later Atharvaveda, however, iron is known and called syama-ayas and is distinguished from copper called lohita (red) ayas [xi, 3, 1, 7]. The *Rigveda* also knows of implements of stone, such as asmachakra, stone pulley [x, 101, 5, 6], or adri [i, 51, 3] or asani [vi, 6, 5], i.e. sling-stones.

The *Rigveda* however, knows of some kinds of armour not known in the Indus Valley, such as the coat of mail (varma) made up of metal plates sewn together (syūta) [i, 31, 15] and close fitting (surabhi) [i, 122, 2] or helmet (*sipra*) [vi, 75, 14], made of *ayas* [iv, 37, 4], or of gold (*hiraŋya*) [ii, 34, 3]. The treatment of hair by the men and women of *Rigveda* also bears some resemblance to Mohenjodaro practice. The hair was combed and oiled. Women wore it plaited. There is mention of a maiden wearing her hair in four plaits (*chatush-kapardā* in Rv. x, 114, 3). Men also sometimes wore hair in coils. The Vasishthas had it coiled on the right [i, 173, 6; vii, 33, 1]. Men also grew beards (*śmaśru*) [ii, 11, 17].

But the most singular feature of the Indus civilization, namely, the cotton industry, is also an established industry in Rigvedic India. The *Rigveda* calls the weaver $v\bar{a}ya$ and his loom *veman* [x, 26, 6], the shuttle *tasara*, the warp *otu*, and the woof *tantu* [vi, 9, 2].

All this Rigvedic evidence is not, however, cited to prove that the Rigvedic evidence is not, however, cited to prove that the Rigvedic evidization was the ancestor or the descendant of the Indus evilization. What is sought to be proved is that the Rigveda, from the very nature of its geographical and historical background (to be discussed fully later), shows wide acquaintance with the non-Aryan world, the conditions of its life and culture, some of which, as described in the Rigveda, tally with those indicated by the remains uncarthed at Mohenjodaro. Thus the non-Aryan of the Rigveda may in a sense be taken to be the non-Aryan responsible for the Indus civilization. This supposition fits in also with the widely accepted view of the age of the Rigveda to be not later than 2500 B.C. and thus practically contemporary with this early history of the Indus Valley.¹

More light is thrown on the Indus civilization by the archæological discoveries at Harappa. These tend to show that its points of contact with the Mesopotamian Civilization, or its borrowings from it had been somewhat exaggerated. The position has been recently very well explained by Mr. H. C. Beck, F.S.A., in Chapter XV, of the work recently published on Excavations at Harappa. He has pointed out eight facts or pieces of definite evidence showing that there was no very close connection between the Indus Civilization and the other

¹ Mohenjo-daro and Indus Civilisation, in three volumes, by Sir John Marshall and other writers.

foreign civilizations. Firstly, he says that "the Indus civilization, as far as steatites are concerned, is primarily a steatite civilization." In Mesopotamia, on the other hand, very few beads of steatite are found, while Harappa revels in them. Egypt shows the use of glazed steatite beads, but these are too small in size and have no resemblance to the larger sizes of the Indian examples.

Secondly, Harappa evolved its own technique of treating and painting steatite which is absolutely unknown to Mesopotamia, Egypt or Crete.

Thirdly, Lapis is very rarely used in Indus civilization, while it is extremely common and popular at Ur. Ur obtained the stone from a source which was far nearer to the Indus Valley than to Ur. It was North-East Afghanistan. Harappa could have it in abundance. But the people of Ur took a fancy for it, and its use there was not much known to Harappa to be able to influence its people.

Similarly, beads of crystalline quartz, amethyst, garnet or obsidian are not at all to be found at Harappa, while they are so common in Mesopotamia and Egypt.

Again, one of the favourite shapes of beads of lapis at Ur was the bicone of standard length and generally elliptical. Such a shape has not been found among the numerous beads from Harappa.

The sixth fact cited is that flattened back beads have not been reported from Harappa, while large numbers of them have been found in Mesopotamia.

Seventhly, objects called plump-bobs (ear-drops) were in use at Ur but not at Harappa.

And, as the eighth fact, it is pointed out that beads made of blue frit were in common use in Mesopotamia and Egypt but not at all in Harappa. This material is not faience but is a chemical compound. It is a double silicate of lime and copper. It has two varieties, hard and soft. The Mesopotamian beads are generally of the soft frit. Neither variety is to be found among the beads of Harappa.

Thus the Indus civilization may be taken to be more a product of India, an indigenous and independent growth, than as an offshoot of the Mesopotamian civilization.

As has been described earlier, the entire Indus civilization was the product of active commercial intercourse by which it was able to obtain its different and varied material from places far and near both in India and outside. Both northern and southern India were, as we have seen, connected in those early days by ties of brisk trade.

It is necessary to draw up a complete picture of this ancient commerce which built up the Indus Civilization and of the roads of traffic by which the Nilgiris could send their supply of green stone and the mines of Hazaribagh their tin to distant cities like Harappa and Mohenjo-daro. The North and South had been from the dawn of civilization bound together in ties of intimate commercial and cultural intercourse which circumvented the supposed barrier of the Vindhyas, or of forests like Dandakāranya. It must have been along these ancient ways of intercourse that the Dravidians travelled from the north to the south. It was these that made possible the extensive race-movements of prehistoric times.

The position is thus summed up by Mr. Ernest Mackay [Indus Civilization, p. 199] : "Imports to the Indus Valley from other parts of India make it clear that the people of the Indus cities traded with, if they did not control, much of the country. For instance, stag's horns were brought from Kashmir: semi-precious amazon-stones came from the latter place or from the far-off Nilgiri hills; jadeite, as Sir Edwin Pascoe suggests, points to communications with Central Asia, and gold to Southern India. Mysore supplies a beautiful green stone of which a cup was found at Mohenjo-daro; and lapis lazuli and perhaps a lead ore containing silver were brought from the farther regions of Afghanistan. We can visualise caravans constantly entering and departing from the wealthy cities of the Indus Valley, laden not only with commodities in daily demand, but also materials to make objects of value to delight both merchant and citizen."

The unique green stone of Southern India also found its way into some distant foreign countries beyond Northern India. In an early layer at Ur were "found two beads of amazonite, a green stone, for which the nearest source," as pointed out by Sir Leonard Wolley, "is in the Nilgiri hills of Central India," "and", as he further states, "at once there is called up the HC-2

astonishing picture of antediluvian man engaged in a commerce which sent its caravans across a thousand miles of mountain and desert from the Mesopotamian Valley into the heart of India."

Opinion is gaining ground that the Indus Civilization was the earliest civilization in the world. This opinion has been curiously supported by certain scientific researches in Plant-Genetics. The origin of civilization is to be found in the origin of the food that sustains it. Civilization ultimately depends as much on men as on plants and animals. It depends, firstly, on a cultivated plant yielding large quantities of food that can be stored up. Secondly, it has to find animals which can be trained and domesticated to supply power for carrying loads and pulling carts or ploughs, and, thirdly, there should be available some plant or animal as source of fibres. Civilization is based on grain of which the most important grown at the present day are wheat, barley, oats, rye, millet, rice and maize. But not all these are of equal value as food for biochemical reasons. For example, maize is lacking in Vitamin B, as compared with wheat or oats. Thus a population fed on maize is liable to the skin disease called *pellagra*. This explains why the maize civilization of Central America failed to achieve the level of early civilizations based on wheat, barley, and rice. Another reason for it is that America lacked domesticable animals. The buffalo or bison cannot compare with the cow. nor the llama with the horse or sheep.

Thus to determine where cereals and cattle were first domesticated would be to determine the place where civilization originated. This task has been undertaken by a group of Russian scientists headed by Vavilov. They have achieved results which are fairly definite in the case of wheat. Vavilov's work is based on his largest wheat collection consisting of nearly 24,000 varieties and on data collected from expeditions to Abyssinia, Afghanistan, and other countries. His method of approach to the problem is also new. Formerly, the origin of a cultivated species was sought in the neighbourhood of its wild forms. Thus, wheat was traced to Syria, the home of wild emmer, while some wheats were found to cross freely with emmer. But there were also others which gave sterile hybrids with it, and must have originated in a different way. Vavilov also took account of wild species but he paid more attention to centres of diversity. It is found, on a comparison of wild species having similar means of dispersal, that the older of them have the wider distribution, that the longer a group has been established in a given area, the more species are found there. Thus the track of varieties is the track of origins. In this way, wheat is found to be a crop of the old world which grows more types of it than America which similarly grows maize.

Fourteen wheat species are traced up to now and these are brought under three groups according to the number of chromosomes in the nucleus. The most primitive form has 7 pairs of chromosomes. Other types have 14 to 21 pairs. The most important for their food value are the 42-chromosome wheats known as bread wheat.

Leaving aside the primitive chromosome wheats, we find two distinct groups of wheat which do not readily hybridize and must be traced to different centres in the track of their varieties. One of these centres is found to be in Abyssinia, the original home of agriculture that led up to the Egyptian civilization. As regards the other type, a study of varieties showed 15-20 in Europe, 52 in Persia, and 60 in Afghanistan so as to lead Vavilov to the conclusion that bread wheat originated from "a centre near the Punjab," "the fold between the Hindukush and the Himalaya". It was this original wheat which was "the source of Indian and Mesopotamian wheats, and of the more important varieties grown in Europe and North America today" [J. B. S. Haldane, *Inequality of Man and other Essays*, pp. 47, 48, 71-76].

Specimens of this carly wheat are found at Mohenjo-daro. "These belong to a group with 21 chromosomes known as 'soft "beat' as contrasted with the enumer group of 14 chromosomes found in Egypt." It is also to be noted that "only one sample of very early wheat is known from Mesopotamia. The Mohenjodaro wheat is also found to be the ancestor of the wheat which is "still in cultivation in the Punjab" [Mohenjo-daro and Indus Civilization, III, 586].

The following words of E. D. Merill, Administrator of Botanical Collections, Harvard University, sum up the conclusions on the subject of Plant-Genetics. [*Early Man*, p. 280]: "The centres of origin of both agriculture and culture were peculiarly restricted. Considering the world as a whole, these areas were the Highlands of Mexico, Bolivia, and Peru in North and South America, parts of Asia Minor (a very important centre), parts of Central Asia, limited areas in Northern India, Central Southern China, and perhaps Abyssinia. It is from these peculiarly restricted areas that all of our basic cultivated food plants and domesticated animals came, and it is in these same restricted areas that early advanced civilizations were developed".

We are thus able to make good the claim that civilization had a very early start in India in the Punjab which was one of the first countries of the world to commence agriculture and grow the food required to sustain a civilization.

Pre-historic Peoples.—We have now to connect as far as possible these successive prehistoric cultures with the races responsible for them, to link up archæology with anthropology. The determination of racial elements, origins, and affinities depends on the study of physical, linguistic, and cultural features. Such a study cannot be attempted except in a special treatise.

Cranial Material.—The prehistoric cranial material for the study of Race in India is rather meagre. It is found but in a few places like Adichanallur, and a few other places in Southern India, Sialkot, Bayana near Agra, Nal in Baluchistan, and Mohenjo-daro. These exhaust the whole field of prehistoric craniology in India. The skulls found at these places are of different types, Proto-Australoid, Mediterranean, and Aipine, dolichocephalic as well as brachy-cephalic.¹ The citizens of Mohenjo-daro were thus already not a homogeneous but a mixed population.

¹ Race-types are classified with reference to two main standards. These are (1) the *Cephalic Index*, i.e. the proportion of the maximum breadth of the skull (measured above the cars) to its maximum length (measured from the glabella to the back of the head). The *dolicho-cephalic* begins with the index being 75 per cent and below. The higher index points to the *brachy-cephalic* type. (2) The *Nasal Index*, which is the proportion of the breadth of the nose to its height. Narrow-nosed (*leptorrhine*) types show the index to be 85-100 per cent.

We have also to admit the existence of both dolichocephalic and brachy-cephalic elements in the earliest population of India, as shown by these skulls.

The differentiation of human skull into these two forms is first seen in the Anthropoid stock out of which man arose, the ancestral form being normally brachy-cephalic and the longer form of skull a later development, though a certain proportion of individuals at the outset showed the long head.

Negritos.—The earliest people to occupy India are supposed to belong to the Negrito race, traces of whom are still found in the Andamans, and perhaps also in the forests of the extreme south of India among the Kadars and Uralis, with their dwarfish stature and frizzly hair. The Negrito contribution to culture is the invention of the bow.

Proto-Australoids.—The Negritos were followed by what are called Proto-Australoids, a dolicho-cephalic type. Its origin is now considered to have been in Palestine and not Australia, as was hitherto supposed. These Proto-Australoids are to be regarded as the true aborigines of India on the ground that their racial type, with its special features and characteristics, came to be ultimately fixed in India, although the type came to India by a very early migration from the West. The type is seen in its purest form in the Veddas. It is this type which is primarily responsible for the platyrrhine and dark-skinned elements found in India in all castes except the highest.

Melanesian.—The Melanesian represents a stabilized type derived from mixed Negrito and Proto-Australoid elements. The type is seen in the hilly tracts dividing Assam from Burma, in the Nicobars, and also on the Malabar coast. It is traced by certain cultural features, such as disposal of the dead by exposure or the canoe cult. But it does not exist in India as a distinct or isolated type with a culture of its own.

Proto-Australoid Contributions to Culture : Munda.— The Proto-Australoids are responsible for the introduction of Neolithic culture and pottery in India. But their linguistic legacy is more enduring and important. They are known as the speakers of Austro-Asiatic languages distributed over the widest area from the Punjab to New Zealand and from Madagascar to Easter Island. The Indian variety of these languages is known as the Mundā, which, accordingly, is to be considered as the earliest language spoken in India. A consideration of the Mundā linguistic areas in India throws light on the course of Proto-Australoid migrations. These may have been from east to west or from west to east. Mundā survives now in the inner Himalayan ranges between Ladakh and Sikkim, in the west of the Madhya Pradesh, and southwards among the Ganjam and Vizagapatam hills, but not beyond the Godāvarī. Mundā shows affinity not merely with the languages of southeast Asia and the Pacific, but also with the agglutinative Sumerian language. Thus it is considered that the various branches of the Austro-Asiatic family of languages originated at some common centre in central or south-east Asia, from which it spread in a more or less southerly direction.

The Munda-speaking peoples are called by the generic names of Mundas, Kolarians, or Kols, and number over six. millions, comprising Santals (numbering about 23 lacs), Bhils (about 18 lacs), Kurumbas (9 lacs), Mundãs (6 lacs), Savaras (5 lacs), Hos (4 lacs), and other minor tribes like the Korwas (of Sirguja and Mirzapur), the Juangs (of Dhenkanal) or the Korkus (of Panchmarhi hills). The vast region comprising the Santal Parganas and Chota Nagpur, together with parts of the Madhya Pradesh, Orissa, and Madras is the seat of a separate, primitive Munda or Kolarian civilization continuing through the ages in its special features such as free village communities, collective hunting and fasting, absence of caste-system, worship by each clan of its own presiding spirit in trees by sacrifice, special code of law, punishment of minor offences by fines in the shape of tribal feasts and of serious ones by expulsion, agriculture, and the like,1

¹ According to Dr. Haddon, the Mundā-speaking peoples belonged to a great Indonesian race which had spread up to Polynesia from its home in the Ganges Valley and Western Bengal. Its cultural unity is traced in certain forms like the outrigger cance found on the west coasts of India and Ceylon, or the cocoanut palm, but chiefly the "shouldered celt" found in parts of Indian Archipelago, Indo-China, Burma, and India. Square-shouldered adzes abound in the Irrawady Valley. They are distinct from the usual India type found in the Sontal Parganas and in central and south India. and allied to the unshouldered copper and bronze types found at Mohenjodaro. Shouldered copper celts are also found in prehistoric ceme-

Mongolian.—This element is traced in the non-Dravidian languages known as Mon-Khmer spoken by peoples inhabiting the Khassi hills of Assam, the hills of Upper Burma and parts of Lower Burma, Malay Peninsula, and Nicobar Islands. These languages came to India with the invaders from the East, the Mongolians, coming partly from Tibet down the valley of the Brahmaputra, and partly from China through Burma by the Mekong, the Salween and the Irrawady. It may also be noted that further invasions from the east have introduced to India two languages of what is called Tibeto-Chinese family, viz. (1) the Tibeto-Burman spoken by the Tibetans of Almora and Garhwal, the Daflas, Abor-Miris and Mishmis of northern Assam, the Garos of western Assam hills, the Kuki-chins of Naga hills, the Bodos or Kochs of Cooch-Behar, Nowgong, Kamrupa and Goalpara in Assam, and the Kachins or Singhphos on the upper Irrawady and the Burmese: and (2) the Siamese-Chinese prevailing in the Shan States of eastern Burma.

The Mongoloid thrust into India from the east has extended farther towards the west than the range of its linguistic occupation. Mongolian features are noticed in some of the terra-cotta figurines and skulls of Mohenjo-daro.

Earliest Languages.—It will thus be noted that these early peoples of India have given to India her earliest languages, the Mundā, Mon-Khmer, and Austronesian and Tibeto-Chinese languages. As will be shown below, these languages were pushed to the south-east by Dravidian, which was in its turn supplanted by the Indo-Aryan tongues.

Mediterraneans and Armenoids.—The Proto-Australoids were followed by the Mediterraneans who came to India in successive waves of migration. An early branch came with its agglutinative tongue, migrating down the Ganges valley, ming-

teries in Chota Nagpur areas. Thus it is not certain if the polished shouldered stone adze of the Irrawady region had preceded or followed the copper celts of India. If the copper celt is later, the shouldered stone celt of India must have been intrusive from Indonesia. If the copper form was the original type (as seen in Mohenjodaro), the stone form must have come to India or Indonesia from the west. It is more probable that the square-shouldered and highly polished Irrawady adze copied a metallic model rather than stone. ling with the Proto-Australoids, and influencing their Austro-Asiatic languages, as already stated. They introduced navigation, agriculture, and architecture of rude stones. Later Mediterranean immigrants came with a more advanced culture and civilization which they had built up in Mesopotamia in association with the Armenoids. The Mediterraneans were dolichocephalic, while the Armenoids of the Alpine stock were brachycephalic. While typical of Armenia and Anatolia, they spread themselves all over Asia Minor and Mesopotamia and mingled with the Mediterraneans in varying proportions, forming the most important element in the population of Sumer. Thus the Sumerians were a mixed race made up of dolico-cephalic Mediterranean and brachy-cephalic Armenoid.

These peoples thus appear to be the most important of the prehistoric peoples of the world, as the first makers of civilization, which probably originated in the "Fertile Crescent" skirting the hills to the north of Mesopotamia and spreading from Syria to the Persian Gulf. The civilization was, as we have seen, in full swing by the end of the fourth millennium B.C., achieving a high standard of comfort, art, and sanitation in city life. Its language was Dravidian, and it used a pictographic script like that used in prehistoric Mesopotamia.

A combination of Armenoid and Mediterranean is also found in India, particularly among the Tamils. There were probably direct contacts by sea between southern India and Mesopotamia. Land contacts between Mesopotamia and Indus Valley are also proved by the discovery of objects of common type in these two regions, and also by the existence of Brahuī in Baluchistan. The Brahuī gives evidence pointing to speakers of Dravidian languages as the ancient inhabitants of Mohenjodaro and perhaps the givers of culture to India.

Alpines.—The brachy-cephalic leptorrhine seen in Bengal in the east and more markedly in the west of India can only be explained by the theory of an invasion of another people, the Alpines, from the Pamirs. This brachy-cephalic stock, an Eurasiatic Alpine stock, must have entered the Indus Valley, dislocating the Mohenjo-daro civilization, and spreading down the West Coast of India to become the ancestors of the Prabhus, the Marathas, etc., and also introducing the brachycephalic element into the Brahuī. They went down farther to the south across the Mysore plateau, but missing the Malabar coast, where is thus preserved at its best the ancient civilization of Dravidian-speaking India. They spoke an Indo-European language, of which traces are still to be found in the Indo-Aryan Dardic language spoken by the people of Chitral, who are also brachy-cephalic. Later, these brachy-cephals, pushed by the Vedic Aryans, carried the round-headed element down the Ganges valley eastward to Bengal.

Dravidians.-It will thus appear that the civilization of the Indus Valley was associated with the speakers of Dravidian languages of Mediterranean race with an Armenoid admixture and a developed culture derived from the near east. This early culture of the Mediterraneans and Armenoids in India may be best described as pre-Vedic Hinduism, anticipating some of the characteristics of later Hinduism already explained. As we have already seen, it was vigorous enough to have influenced Vedic civilization. The Rigveda [i. 6] speaks of its strength in cities, castles, wealth, and of its women bathing in milk. The "noseless" non-Aryans of the Rigveda could refer only to the Proto-Australoids, in which case tribes like the Bhils or the Chodhras would be then lingering in hills and forest areas in spite of the Mediterranean and Alpine migrations, or they might have been in occupation of the Indus Valley with the decline of its pre-Vedic civilization. Again, the Rigyedic story of conflict between Vasishtha and Visvamitra is that of conflict between two cultures, of which the amalgamation is indicated by the Kshatriva becoming a Brahman. There is also reference to non-Arvan Rishis in later traditions. Lastly, the Brähmi script of later Vedic civilizations is itself traced to the Indus Valley pictographs. As early as 1867, Mr. E. Thomas suspected that the Aryans invented no alphabets of their own in the course of their wanderings, but depended on the country in which they settled for the script by which they could reduce their speech to writing. This theory for long received no acceptance, and the Brāhmī script was traced to Semitic origins and considered to have been imported from Phoenicia in the first millennium B.C. It remained for Professor Langdon to prove after more than six decades that the Brāhmī characters derive from the Indus signs, the symbols

used on their seals by the pre-Aryans of the Indus Valley. Thus, as he points out, "the Aryan Sanskritists gave values derived from their own language to these characters. In other words, they knew their ideographic meaning, translated them into Sanskrit, and derived the syllabic values from the Sanskrit words."

It will thus appear that the Dravidian speakers were the latest occupants of India before the Indo-Europeans arrived. They came from the north-west, where they left traces of their 'anguage among the Brāhuī (who themselves regard the remains of Mohenjo-daro as the work of their ancestors), and brought with them the ancient cultures of Mesopotamia, Asia Minor, and the eastern Mediterranean. Dravidian place-names are sometimes traced in Mesopotamia and Iran, while an ancient language spoken in Mittani (Kharian) reveals striking similarities to modern Dravidian of India.

Thus the fact seems to be that India was not an isolated welter of Australoid tribes prior to the coming of the Aryans or Indo-Europeans in the second millennium B.C., as was so long supposed, but had already a civilization comparable to and in communication with the ancient Mesopotamian civilizations in the valleys of the Indus, and possibly of the Ganges too.

Marks of their Migration from North to South .-- The Dravidians retreated before the Aryans, leaving notable marks of their strength in the north and of their march from the north to the south, where they found their final home. Dravidian elements are to be found alike in Vedic and classical Sanskrit, in the Prākrits, and even in the modern vernaculars of Northern India. It is found by linguists that Indo-European, on its introduction to India, suffered a change which could only have come from the Dravidian source. This is the presence of a second series of dental letters in the language of the Rigveda, by which it is distinguished from that of the Avesta and from all other languages of the Indo-European family. Further marks of the Dravidian migration from the north to south are to be found in other islands of Dravidian speech and culture preserved among certain kindred peoples they left behind in the north, such as the Mal and Sauria Paharis of Rajmahal hills, the Oraons of Chota Nagpur (numbering about 8 lacs). the Gonds (numbering about 30 lacs), and the Kandhas of Orissa and its States now merged in the Indian Union.

The Dravidian-speaking peoples present three racial types or elements, viz. (1) Dolicho-platyrrhine or Vedda-Australoid type, (2) Dolicho-leptorrhine or Mediterranean type, and (3) Brachy-leptorrhine or Alpine type. Generally speaking, the Deccan is brachy-cephalic, while the region south of it, including the two coastal strips, is dolicho-cephalic. There is also to be found an increasing association of brachy-cephaly with leptorrhiny, and also of leptorrhiny with Sanskrit language, as is the case with Kanarese, Malayalam, Marathi, and Telugu, while Tamil, the least Sanskritic of these, is spoken by the dolicho-platyrrhine peoples.

The brachy-cephalic Alpine type is spread along the western littoral from Gujarat to Coorg, and also from Banare to Bihar, and markedly in Bengal where it is associated with leptorrhiny, most in its central and deltaic parts, and in decreasing degrees in the north and east. There is thus a continuity of type from Bombay to Bengal. For the origin of the Ben galis we have thus to look to the west rather than to the east or the Mongolian source, some of whose chief characteristics they lack, such as absence of bodily hair¹ [Dr. B. S. Guha, in his presidential address to the Anthropological Section of the Indian Science Congress for 1928].

¹ This chapter is largely based on the material presented by Dr. J. H. Hutton in pages 357-369 and 439-460 in vol. i, part i, of the Census Report for 1931.

CHAPTER III¹

GEOGRAPHICAL AND SOCIAL BACKGROUND

Indian history proper begins with the advent of the Aryans to India. It is, however, necessary to study at the outset the physical basis of that history in the geographical conditions influencing its course through the ages. We may remember the old saying of Richard Hakluyt : "Geographie and Chronologie are the Sunne and the Moone, the right eye and the left eye of all history."

The principal features in the geography of India that have bearings on her history are (1) Isolation, (2) Intercourse, (3) Vastness, (4) Variety, and (5) Unity.

Isolation .- There is hardly any part of a continent that is so clearly separated and marked out by Nature as a region by itself as undivided India. Mountain-guarded in the north and seagirt in the south. India is indisputably a geographical unit, and is effectively isolated by sharply defined boundaries from the rest of the world. The Himalayas present a double wall running unbroken for a distance of about 1,600 miles from east to west and presenting an average width of 250 miles throughout this length. On the Tibetan side of the northern wall rise the three rivers, Indus, Sutlej, and Tsan-po (Brahmaputra in its Indian part), and on the Indian side of the southern wall, the Ganges and its northern tributaries. The Himalayan barrier at its eastern extremity throws out spurs forming the Patkoi, Naga, and Lushai hills, densely forested, separating the Irrawaddy Valley of Burma from the plains of India and obstructing the direct way from China to India. At its north-western end, the barrier is taken up by an angle of the loftiest mountain ridge made up of the Karakoram, with its second highest peak in the world, Mount Godwin Austen,

¹ This chapter has in view the geographical features embracing undivided India as a whole. These are not limited by the barriers of its political partition into the two States of India and Pakistan, and are in many cases common to both in continuous natural formations like rivers and mountains. and of the Hindu Kush, and enclosing within it the Valley of Leh, Gilgit, and Chitral, forming the northernmost outposts of India. Beyond, or south of, the Hindu Kush lie the Sufed Koh and Sulaiman ranges separating India from Afghanistan, and Kirthar hills separating it from Baluchistan.

Towards the south, the ocean in the olden times operated as a formidable isolating barrier, except for such peaceful periodical trading intercourse as could be carried on by sail-shipping and the slow and timid coasting voyages of those times. It served as an ample protection against overseas invasion until the Europeans rounded the Cape of Good Hope. It was the arrival in 1498 of the three small ships of Vasco da Gama at Calicut that first opened up the country to bold adventurers coming by way of the sea, a path of conquest which was subsequently followed successively and successfully by the four European Powers, the Portuguese, the Dutch, the French, and the English. The science of navigation has now transformed the ocean into a highway of intercourse and invasion and made the control of the country depend on command of the sea. The sea-coast cities of Bombay and Madras, Calcutta, or Colombo, have now acquired a new strategic importance in the defence of India. Colombo, upon which now converge four streams of traffic, from the Mediterranean, the Cape of Good Hope, Australia, and Singapore and the Far East, became the strategical centre of British sea-power in the Indian Ocean. It is, however, to be noted that on the west coast, the barrier of the Western Ghats, and on the east coast, the want of natural harbours, the shallow depth of water along the coast, and the unruly surf, constitute natural and permanent obstacles to intercourse by way of the sea with foreign countries. The character of the coast-line of India is not also favourable to her growth as a sea-power. Much of the country is deeply inland and the majority of its people are naturally land-locked. There are few indentations, few of those deep bays, gulfs, or river-mouths opening up the inland areas, as is the case with Norway or the British Isles, of which no part is far from the sea. Even the few bays and gulfs which India has are not suitable sites for harbours. The only natural harbour in India is Bombay. Madras is an artificial harbour, while Calcutta is on a river-mouth. Owing to this natural handicap, Indian shipping and seamanship have played a very small part in Indian history.

While India is thus as a whole isolated from the outside world, some of her parts, again, are isolated from one another. The ranges of the Vindhya system, with their almost impenetrable forests, have in all ages formed the great dividing line between northern and southern India. It was at this barrier that Aryan colonization had stopped for a long time, according to older Sanskrit texts. The two halves of India offer to this day striking contrasts in race, language, and social customs. For instance, in an old law book, that of Bodhayana of about 500 B.C., the outstanding social custom dividing the South from the North is stated to be the southern practice obtaining to this day of a man's marriage with his maternal uncle's daughter. The South has had, in fact, an independent history, with but few points of contact with the history of northern India. Very few were the sovereigns whose dominion had embraced both the North and the South, like that of Chandragupta Maurya and Asoka. Akbar or Aurangzeb. The comparative isolation of the South was responsible for its immunity from Moslem invasions to which northern India had been subjected for several centuries. The Vindhyan system, including the Satpuras, and enclosing within it the valleys of the Narmada and the Tapti, runs from the Gulf of Cambay to Rajmahal in Bengal. Towards the centre of India, the Vindhyas and Satpuras converge to form the highlands of Madhya Pradesh. Towards the East, up to the Eastern Ghats, the region between the Godavari and the Mahānadi, extending northward to the valley of Son, is again isolated by hills and fever-haunted forests, the abode of aboriginal peoples beyond the pale of civilization, in tracts like the Sontal Parganas, the hills and forests of Madhya Bharat, or on the Nilgiris, as already described. Even in the time of the Vedic text, Aitareya Brāmaņa (not later than about 2000 B.C.) non-Āryan peoples like the Andhras, Pundras, Sabaras, Pulindas, and Mutibas, are mentioned as living in the outskirts of Aryan civilization in the Vindhyan jungles towards the East. In the farther South, again, the Anamalai, Palni, and Cardamum hills isolated the kingdom of Kerala, which in modern times gave rise to the state of Travancore-Cochin. The effects of their isolation are seen in the prevalence of peculiar social customs like polyandry or matriarchal system of inheritance (by which a man's heir is his sister's son), which are foreign to the Aryan social system and the rest of India. Another striking example of isolation is that of the two most densely-peopled regions of southern India, viz. the Carnatic plain from Madras to Tanjore, and the Malabar coast between Cochin and Calicut. The isolation from each other of these two populous regions is only breached by what is called the Gap of Coimbatore, or Pālghāt, giving to the Carnatic markets the much-needed access to the many natural harbours and ports on the Malabar coast. The surf of the Coromandel coast, coupled with the barrier presented by the Western Ghats behind the Malabar coast, accounts for the comparative isolation of southern India, only relieved by the Gap of Coimbatore, which has thus a great importance.

Intercourse.—With all this physical isolation, India presents an extraordinary composite and heterogeneous social complex, the undoubted outcome of her intercourse with the world outside, of immigrations and invasions from without. The history of India to some extent thus belies her geography. World-movements of thought and population have impinged upon her isolation through the ages and introduced to her civilization a variety of racial and cultural elements which may be broadly distinguished as (1) pre-Dravidian, (2) Dravidian, (3) Aryan, (4) Iranian, (5) Greek, (6) Roman, (7) Scythian, (8) Hun, (9) Islamic, and (10) European.

The question is : How was all this influx of foreign influence possible? What were precisely the ways through which it penetrated into India? The north-castern frontiers present but few gaps, and these do not admit of movements on a large scale. The three passes, the Jelap, the Natu, and the Donkia, which lead from Sikkim into Tibet, are too high and permit only of small traffic. In the East, passage is offered by the course of the Brahmaputra from Tibet, and from China by the three rivers, Mekong, Salween, the Irrawady, but immigration on a large scale by this way is impeded by the dense growth of jungle and its wild denizens, and by the British occupation of Upper Burma. The defence of India in this quarter is thus practically left to Nature.

The whole of the northern bulwark for well-nigh 1,500 miles is practically impenetrable. There are a few passes leading from the Pamirs by way of Gilgit, and from Tibet by Leh, and the gorge of the Sutlej into India. By the three passes known as the Muztagh ("Snowy Mountain"), the Karakoram ("Black Mountain"), and the Changchenmo, which are all over heights of 18,000 feet, some small traffic is carried on between the Punjab and castern Turkestan, and Tibet on the other side. But these are fit for the passage of traders and not for migrations or invasions. These were not considered suitable by the medievai Buddhist pilgrims from China like Yuan Chwang who first travelled westward by the desert routes north of Tibet, as far as Oxus, and then south-ward over the Hindu Kush.

In the South, India has been always open to foreign influence by way of the sea, and of peaceful commercial intercourse, first with Egypt and Babylon, and later with the Roman Empire. Indian products like indigo, tamarind-wood, or muslin, in which were wrapped the mummies, have been detected in the tombs of Egypt. The booty which Pharaoh carried in his vessel to Egypt included elephants' teeth, gold, precious stones, sandalwood, and monkeys, which came from India. Some scholars find in the Bible evidence of Indian trade in the mention of articles which India alone could supply in those days, such as precious stones, gold, ivory, ebony, peacocks, and spices, forming part of the merchandise carried by Solomon's ships. Indian teak is traced in the ruins of Ur, and the Babylonian word for muslin is Sindhu. The Indian Pali work, the Baveru-Jātaka of about 500 B.C., definitely mentions Indian traders taking peacocks to Babylon. The specifically Indian products-rice, peacocks, and sandal wood-were known to the Greeks only by their Indian, Tamil, names. As direct intercourse between India and Babylon had ceased after 480 B.C., these products must have been imported to Babylon much earlier so as to have reached Greece by about 460 B C., and become familiar at Athens in the time of Sophocles (495-406 B.C.) who mentions them. The chief centre of all this ancient trade, according to old Indian texts, were at Surparaka-Sopara and Bharukachchha-Bhroach on the Bombay coast. The later Indian trade with Rome, which developed most between the times of Augustus and Nero, had its chief centres at Muziris (Cranganore) on Malabar coast and at Kāviripaddanam (Puhar) on the Coromandal coast from which were shipped the Indian goods greatly prized in Rome. viz. spices and perfumes, silk, muslin and cotton, pearls and precious stones. The centre of the pearl trade was the old Pandya capital of Korkai (Tirunelvely), now buried in sand. Of precious stones, beryl, most in demand, was found in the mines of Coimbatore and Salem districts. Roman coins are also mostly found in Coimbatore and Madura. Old Tamil texts refer to "powerful Yavanas" and "dumb Mlechchhas" as being in the service of the Tamil kings. The word Yavana itself came into Sanskrit from Indian intercourse with the Ionians (Greeks). To this intercourse were also due the deposits of two small settlements of Jews and Christians on the Malabar After Egypt, Babylon, and Rome, the merchants of coast. Yemen in south Arabia came into this Indian trade. After the rise of Islam in A.D. 622, the Arabs controlled all the harbours of the Arabian Sea and African coasts, and the maritime route from the Persian Gulf to India and China. Up to the end of the fifteenth century A.D. the Indian contact with the West was confined only to coasting trade on the western side of India. Then the sea vielded to the science of navigation and paved the way of European incursions to India, where previous invaders and conquerors found their way by the land-routes on the northwestern frontiers.

The north-western frontier, though apparently mountainguarded, is really the most vulnerable frontier in India,¹ requir-

¹ The land frontier of 3,000 miles separating Canada from the United States does not require to be defended by a single fort or a gun, while the other Dominions of the Commonwealth, Australia, New Zealand, and Newfoundland, are islands. The Union of South Africa is equally free from the danger of foreign invasion. Of their total revenues, the expenditure on defence amounts to 2.4 per cent for Australia, 2.9 per cent for Canada, 7.2 per cent for Irish Free State, 3.9 per cent for Newfoundland, and 2.4 per cent for South Africa. But British India had to spend on her defence more than 60 per cent of her central revenue and nearly a third of her total net central and provincial revenues taken together. This is due to the perpetual menace of raids by the independent tribes living beyond the north-west frontiers. The period of 72 years from 1850 to 1922 saw as many as 72 expeditions, an average of one a year, being sent against these tribes ! This heavy burden of anxiety which British India had to carry for her security was a serious obstacle to her internal development, being a permanent drain and strain on her resources. Of course, conditions of Defence have been now completely revolutionised by the World Wars I and II.

ing constant and costly preparations for its defence. What further increases its insecurity is that it is an extensive frontier passing through turbulent tribal territory up to Afghanistan, beyond which again is the menace of the continental Powers of Europe.

To understand the full significance of the north-west frontier, we must look beyond the immediate boundaries of India and study the features of the Iranian plateau comprising the three adjoining countries of Afghanistan, Baluchistan, and Persia. This plateau rises to the inaccessible heights of the Pamirs in the north-east and of Armenia in the north-west, but is easy of access on other fronts towards the Persian Gulf and the Arabian Sca. India. and Turkestan or Turan to the north. The defence of India, therefore, needs control of the Persian Gulf and Arabian Sea and absence of alien bases of power on the Iranian plateau towards the south and east. The access to India is easy from Afghanistan by way of the Kabul River and from Seistan, and from both it is agreed that foreign Powers are to be excluded. The Hindu Kush, separating the basin of the Oxus from that of the Indus, is easy of access from both sides and offers several ways into India, along river-valleys, of which the most famous and frequently trodden is the Khyber route. The Khyber leads from Kabul down the valley of the Kabul River to Peshawar. The Kurram River flows from Afghanistan into the Bannu district through the Kurram Pass and then falls into the Indus. The Tochi valley leads from Ghazni into India: through it flows the Tochi River, which rises on the slopes of the Waziristan Mountains and falls into the Kurram. The Gomal lies between Afghanistan Mountains and Dera Ismail Khan. Further away, where the Afghan Mountains subside towards the west, lies another way round their fringe over the open plateau from the Herat to Kandahar, and not far from Seistan, and leading south-eastward from Kandahar through a rocky district into the low-land of the Indus. This is called the Bolan route after the last gorge towards India. A last line of communication connecting Persia with India passes through the inhospitable region of Makran along the coast of Baluchistan. This route is famous in history as being chosen (probably on the precedents of previous conquerors, Semiramis and Cyrus) by Alexander the Great, with disastrous consequences to his army on its return journey from India in 325 B.C. This route was later much frequented by Arab traders. There is, again, a lateral connection between the two more important routes, the Khyber and Bolan, following a chain of valleys between Kandahar and Kabul through Ghazni. This route has been made famous in history by Alexander's march to his Bactrian and Indian campaigns and in recent times by the march of General Roberts from Kabul to the relief of Kandahar in the Afghan War of 1882. Several Passes also lead from the Kabul-Kandahar road into the mountainous belt of the Indian frontier.

All this geography thus supplies the key to much of Indian history, ancient and modern. The breaches in the northwestern barrier of mountains just discussed have served in all ages as highways of peaceful intercourse and violent invasions, of extensive racial movements and immigrations. By these ways came some of the prehistoric peoples, and the Aryans who have made Indian history, and in historical times foreign invaders like Cyrus and Darius, Alexander, Seleucus, and Demetrios, the Scythians, Parthians, and Kushans, under whom India entered into active commercial intercourse by land with the Roman empire, and, in the medieval age, the Muslims. The only exception is in the case of the most important factor of Indian history, the European, which came into India from the south by way of the sea.

The defence of India under British rule had been organized with reference to the two vulnerable points of Khyber and Bolan. The Indian defensive forces were grouped into a northern army distributed from Calcutta past Allahabad and Delhi to Peshawar, in support of the Khyber front, and a southern army distributed through the Madras and Bombay Presidencies with reference to the garrison city of Quetta guarding the Bolan route, which could be further reinforced by sea through Karachi directly from Britain. The defence of British India was further strengthened by the North-Western Railway from Karachi, with branches towards the Bolan and the Khyber, and backed by the barrier of the Rajputana Desert.

The military or strategic importance of the Raiputana Desert to the defence of India through the ages can hardly be overstated. This waterless waste running from the Rannof Cutch north-eastward to a distance of about 400 miles. with a width of 150 miles, with the Aravalli range in its rear as a further bulwark, forms a second line of fortifications against hostile incursions by way of the Bolan and Makran routes. Once the Khyber route is passed, the way is open to Delhi, which may be called "the historical focus of all India". Standing at the northern extremity of the Aravallis, where the invading forces from the north-west come through to the navigable waters, it commands the gateway which leads from the Punjab plains to the interior, the heart of India, comprising the plains of the Jumna and Ganges. This gateway was not reached by the Persian invader, Darius, in the sixth century B.C., nor by Alexander, whose progress was stopped at the Beas. It was only left to the Muslims to pass this gateway and thereby effect a permanent settlement in India. But they took nearly five centuries, from the date of the Arab conquest of Sind in A.D. 712 to that of the first Sultan of Delhi, A.D. 1193, to spread from the confines of India through the Delhi gateway into the heart of India. During all this time it was the Raiputs who, aided by the natural advantages of their country, held in check the Muslim invaders on the direct road to Delhi from the north-west and posted themselves on the southern flank of their advance. The conquest of Delhi made the Muslims the predominant power in India. "We may think of the Indus basin-lying beyond the Rajputana Desert, low beneath the uplands of Afghanistan-as being an antechamber to India proper. In this antechamber, for more than 900 years, the Muslims have had a majority. Northwestward of Delhi, in the gateway between the desert and the mountains, the ground is sown over with battlefields-ancient battlefields near the Jumna, where the incoming Muslims overthrew the Indian resistance, and modern battlefields near the Sutlej, where advancing British power inflicted defeat upon the Sikhs. It is by no accident that Simla, the residence of the British Viceroy during half the year, is placed on the Himalayan heights above this natural seat of empire and struggle for supremacy." [Cambridge History of India, I. 24.]

Vastness.--India undivided, though geographically distinct as a single and separate country, is more like a continent than a country in its size and dimensions. It is as large as the whole Continental Europe without Russia, more than twenty times the area of Great Britain. Among its divisions or States, the Punjab, Uttar Pradesh, and Madhya Pradesh, each exceeds Great Britain in size: the area of each of the States of Bengal and Bihar and Orissa approximates to that of England and Scotland together; the States of Bombay and Madras are each bigger than Italy, while Assam is of the size of England alonc. Nor does India suffer in greatness if estimated not in area but in terms of population. Former British India alone had a population nearly 24 times that of the United States: former Indian States, making up a third of the area of India, absorbed a fourth of its total population, which is as much as a fifth of that of the whole world. Even states like old Bengal, U.P., or Madras are each more populous than Great Britain. while the small State of Assam has the population of countries like Belgium, Sweden, or Holland,

Variety.—The vastness of India has produced a corresponding variety in respect of both physical features and social conditions for which India has been aptly described as "the epitome of the world."

(a) Physical.-In undivided India is to be found an assemblage of geographical conditions which are distributed among all other countries of the world. In the wide range of her latitudes and longitudes, she offers all the three types of climate, the Arctic or Polar, in the vast areas above 15,000 feet among the Himalayas, and the Temperate and the Tropical climates in her lower levels down to the sea. In the matter of moisture or rainfall, she offers an equally wide range, from the world's highest record of 480 inches at Cherapunji to less than 3 inches per annum in parts of Sind and Raiputana. These wide varieties of climate again have produced corresponding varieties of products. According to Hooker, the flora of India is more varied than that of any other country of equal area in the eastern hemisphere, if not in the globe. According to Blandford, the variety of fauna in India far surpasses that of Europe, although Europe is about twice the

size of India. Indeed, as Lilly puts it, the products of India include everything needed for the service of man. India as a whole is thus endowed by Nature with a singular capacity for economic self-sufficiency and independence which it is left to Man to realize.

(b) Social: Peoples, Languages, and Religions.—The immensity of the population of India, making up a fifth of mankind, embraces the widest variety in culture and social life. Here meet all the three primary ethnological types of mankind, the Caucasian or white type, with its subdivisions of blonde and dark, the Mongolian or yellow type, and the Ethiopian or black type (in the Andamans). These broad divisions include ethnographically the following physical types, most of which were first suggested by Sir Herbert Risley in the *Census Report* for 1901:

(1) The *pre-Dravidian* aboriginal type, marked by short stature, broad (platyrhine) nose, and other characteristics already discussed and demonstrated in the various jungle-tribes in India.

(2) The *Dravidian* type, marked by short stature, dark complexion, plentiful hair, long head, and broad nose; found practically all over the region lying to the south of the U.P. and east of longitude 76° E.

(3) The Indo- $\bar{A}ryan$ type found in Kashmir, the Panjab, and Rajputana, marked by tall stature, fair complexion, plentiful hair on face, long head, and narrow and prominent nose.

(4) The *Turko-Irānian* type found in the N.W. Frontier Province, Baluchistan, and the regions to the west of the Indus, characterized by "stature above mean, complexion fair, head broad, nose very long though narrow". "The Indus is thus the ethnographical boundary between the Turko-Irānian and Indo-Āryan types, as it is the political boundary between Irān and India" [CHI, p. 44].

(5) The Scytho-Dravidian type found in Sind east of the Indus, Gujarat, and western India, marked out from the Turko-Irānian type by "a lower stature, greater length of head, a shorter nose", and the like. Its name assumes that the foreign broad-headed element of the type was due to the Sakas (Scythians) who ruled in western India between c. A.D. 120

380. But the Sakas, as their history shows, could not have affected the indigenous race when they themselves, instead of affecting its culture, became gradually Hinduized. The foreign element must have come from the broad-headed Alpine race of western Asia, including Irān, which found its way into western India, like the Dravidians, ages before the way of migration was blocked by desiccation.

(6) The Arvo-Dravidian or Hindustani type of east Punjab, U.P., and Bihar, with "head form long, complexion ranging from brown to black and nose from medium to broad, stature below the average, 5 ft. 3 in, to 5 ft. 5 in." It is traced to the mixture of the Indo-Āryans with the Dravidians whom they conquered. It first appears as a separate type about the longitude of Sirhind. The Rigveda also shows that Aryan colonization did not extend in its time beyond Sirhind, the valley of the Sarasvati. The Rigveda is associated with the country of the seven rivers (Saptasinahavah [viii, 24, 27]). Later Vedic Literature of the Brahmanas and Upanishads is associated with the more easterly region between the Jumna and the Ganges and up to Mathura District, called Brahmarshidesa, which included Kurukshetra, the land on which the fate of India has been determined from the days of the Mahabhārata to those of the battles of Panipat. The evidence of Literature thus supports that of Ethnology in regard to the boundary between the two physical types following naturally the line of division between two phases and periods of history, that of Indo-Āryan tribal migration succeeded by that of Indo-Arvan colonization, a much slower progress involving conquests¹ and fusion of races and cultures.

(7) The Mongoloid type in Burma, Assam, and the sub-Himalayan tract comprising Bhutan, Nepal, and fringes of the U.P., Punjab, and Kashmir, marked by "broad head, dark, yellowish complexion, scanty hair on face, short stature, flat

¹The Rigveda mentions only once (vii, 18, 19) the Jumma in a manner showing that a battle was on its banks. But the region between the Upper Jumna and Ganges was occupied fater as a result of conquests indicated in the Satapatha Brāhmaņa (xiii, 5, 4, 11-14), the triumphs celebrated by Bharata Dauhshanti after his victories on the Jumna and the Ganges. face, and oblique eyelids." This type is due to Mongolian invasions from Tibet and China.

(8) The *Bengali* type in Bengal and Orissa, marked by "broad head, dark complexion, plentiful hair on face, medium stature, and medium nose with a tendency to broad". Risley termed this type as Mongolo-Dravidian, as he thought it was a blend of Dravidian and Mongoloid elements. It has been already shown that it is really the brachy-cephalic Alpine type. The line of division between Bengal and Bihar is both political and ethnographical, and is also indicated in literature. In the *Atharvaveda*, for instance, the *Māgadhas* and the *Angas* are mentioned as peoples outside the pale of Āryan civilization, while the *Satapatha Brāhmana* has a legend telling of the spread of Brāhmanism from the west eastwards up to Videha or Tirhut.

This ethnological variety is, however, accompanied by a wider variety of languages in India. The Census Report for 1931 counts the living languages of India to be as many as 225, representing between them four of the great families of human speech, viz. the Austric, the Tibeto-Chinese, the Dravidian, and the Indo-European. The Dravidian languages are stabilized in the south in Telugu and Tamil, Kanarese, and Malavalam, each with a great literature. Beyond them in the north. Indo-Āryan holds its sway, driving before it the spoken languages which have not yet been stabilized and stereotyped by literature. The present distribution of Indo-Arvan languages. follows lines adumbrated in old Sanskrit texts. The Satabatha Brāhmana [iii, 2, 3, 15] locates the home of speech, i.e. Indo-Āryan, in the land of the Kuru-Pañchālas from which it spread in different directions. Later, Manu locates the home of Indo-Āryan culture in what he calls Āryāvarta, i.e. the region between the Himalayas and the Vindhyas from the Bay of Bengal to the Arabian Sea, with Brahmarshideśa, the land of the Kurus and Pañchālas, Matsyas and Sūrasenas, still leading in that culture and supplying its teachers [ii, 22]. So, in modern times, we find the central region of Midland languages represented by western Hindī, with an Inner Band of languages like Panjābī, Rājasthānī, and Gujarātī on the west, Pahārī on the north, and Eastern Hindi on the east, and an Outer Band comprising Kashmiri, Lahndā, Sindhī, and Kachchhī on the west, Marāthī on the south-west, and Bihārī, Bengali, Assamese, and Oriyā on the east. It is as if we are following the spread of Indo-Āryan culture from Brahmarshideśa corresponding to the Midland linguistic area along the course of Jumna-Ganges through Kosala to Videha and Vanga, embracing the areas of the Inner and Outer Bands of languages.

The linguistic relations between Brahmarshides a and the earlier Āryan settlements in the land of the Seven Rivers must have been affectd by the invasions of the Persians (Achæmenids) in the sixth century B.C. from Bactria as their base. The result of this contact between Irānians and Indo-Āryans was the rise of a group of mixed languages called Pisācha languages, still containing many archaic Vedic words, and spoken in the districts about the Kabul (Kubhā) and Swāt (Suvāstu) rivers referred to in the *Rigveda*. Beyond the Pisācha languages and the Outer Indo-Āryan Band on the west are Irānian languages like Pashto and Baloch.¹

India undivided also presents the largest diversity in its religious aspect. Here are to be found all the world-religions. Hinduism alone is the religion of about 290 millions of people, of two-thirds of the people of India, of one-half of the total population of former British India, and of one-eighth of that of the globe. A religion that suits so many millions must be very catholic and cosmopolitan in its principles. Bv the synthetic comprehensiveness and universality of its system, the protean form of its mythology, its ceremonies and its ordinances, it has become the common religion of people differing widely in race, language, and political and social traditions and interests. Islam counts as its followers nearly 90 millions of people who were distributed through the different States of undivided India in different proportions to their total populations, forming majorities in the old North-West Frontier Province, the Punjab, Sind, and Bengal, and minorities elsc-Then there are Buddhists numbering over 12 millions. where. Christians over 6 millions, Sikhs over 4 millions, Jains over 1 million, and a lac of Parsis. India also presents human evolution in all its states and stages from the lowest to the highest.

¹See Chapter II of *Cambridge History of India*, Vol. I, uponwhich I have freely drawn. She may be described as a museum of cults and creeds, customs and cultures, faiths and tongues, racial types and social systems, but it is a museum not of dead things and material objects, but of living communities and spiritual systems, each evolving along its own lines.

Unity.— The character of India as a single country is thus easily missed and lost in her continental extent and diversity. The whole is too large to be grasped as a unit and is realized only in parts. It is just like the blind men seeing the elephant in the old adage, each taking one of its limbs he could feel by his touch for the whole animal. Or we are reminded of the story in one of the Upanishads of the quarrel for supremacy among the different members of man's bodily organism, not realizing the common life by which each is sustained. It is difficult, indeed, to discover the One in the Many, the Individual in the Aggregate, the Simple in the Composite. Mere variety is, however, no proof against unity. It is, on the contrary, a sign of vitality, richness, and strength.

The geographical unity of India is, however, patent on the map showing how the country is sharply separated from the rest of the world by almost inviolable boundaries, very unlike the disputed frontiers artificially settled between most of the countries of continental Europe.

And yet the question remains : How far is this fundamental unity of India realized by her people or exemplified in her history? Nature's gifts are of no consequence unless they are harnessed to the service of Man who must know how to explore, exploit, and take advantage of them.

The first condition of the progress of a people in political life and civilization is its possession of a fixed and definite piece of territory which it can call and serve as its own mother country. A people that has not found a home for itself but lives in unstable and unsettled conditions, in unrest and uncertainty, lacks the conditions in which culture and civilization can take their rise. The nomadic is one of the lowest stages of civilization. A great handicap to the political development of the Jews has been that they have not united to build up a fatherland for themselves. The country is to a nation what the body is to the individual. It is necessary for its self-expression. The making of a nation, no doubt, depends upon several unities, such as those of language, religion, government, common history and tradition, manners, and customs. But all these are secondary factors which have their roots in a common life in a common country.

The early progress of the Indians in culture and civilization was owing to their first grasp of India as their common motherland. Accordingly, they applied to the whole of India the designation of Bharatavarsha. The Puranas expressly define the term Bharatavarsha as "the country that lies north of the ccean (i.e. the Indian Ocean) and south of the snowy mountains (Himalayas), marked by seven main chains of mountains, viz. Mahendra, Malaya, Sahya, Suktimat, Riksha (mountains of Gondwana), Vindhya, and Fārivātra (western Vindhyas up to the Aravallis): where dwell the descendants of the Bharatas, with the Kirātas (barbarians) living to its east, the Yavanas (Ionians or Greeks) to its west, and its own population consisting of the Brahmanas, Kshatriyas, Vaisyas, and Sudras (i.e. the Hindus)". [See Wilson's Vishnu Purāna, ii. 127-9]. The modern name India for the country is not an indigenous appcilation but a foreign import. India was known to foreigners in olden times by its river Sindhu, which the Persians pronounced as Hindu and the Greeks as Indos, dropping the hard aspirate. But the name Bharatavarsha is not a mere geographical expression like the term India. It has a historical significance, indicating the country of the Bharatas, of Indo-Arvan culture of which the Bharatas were the chief bearers. Once their country was settled, the Indo-Āryans built it up with all their devotion. It engaged their deepest sentiments of love and service as expressed in their literature. One of the commonest prayers for a Hindu requires him to recall and worship the image of his mother country as the land of seven sacred rivers, the Ganga, Yamunā, Godāvarī, Sarasvatī, Narmadā, Sindhu, and Kāverī, which between them cover its entire area. Another prayer calls up its image as the land of seven sacred cities. Avodhva, Mathura Māyā (modern Hardwar), Kāśī, Kāñchī (Conjeeveram), Avantikā (Ujjain), Dvārāvatī (Dwarka), representing important regions of India. The spirit of these prayers is further sustained by the peculiar Hindu institution of pilgrimage. It expects the Hindu to visit in his life the holy places associated with his faith. Each of the principal Hindu faiths or sects

has its own list of holy places. Vaishnava, Saiva, or Sakta, and these are distributed throughout the length and breadth of India and not confined to a single Province. Thus the different sects are at one in enjoining upon their respective votaries a pilgrimage to the different and distant parts of India and thereby fostering in them a live sense of what constitutes their common mother country. In the same spirit, Sankara established his four Mathas (religious schools) at the four extreme points of the country, viz. Jyotirmatha in the north (near Badri-Kedar on the Himalayas), Śāradāmatha at Dwarka in the west. Govardhana-matha at Puri in the east, and Sringeri-matha in Mysore. Sectarianism is thus an aid to nationalism in Hindu culture. In some of the sacred texts like the Bhagavata Purana, or Manu-Smiti are found passages of patriotic fervour describing Bhāratavarsha as the land fashioned by the gods themselves (devanirmitam sthanam) who even wish to be born in it as heaven on earth, for the spiritual stimulus of its environment, and above these is the culminating utterance-"Mother and Mother-Country are greater than Heaven !" (Janani janmabhūmiścha svargādabi garīvasī).

All these prayers and passages show that the Hindu has elevated patriotism into a religion. In the words of a distinguished British critic,¹ "the Hindu regards India not only as a political unit naturally the subject of one sovereignty—whoever holds that sovereignty, whether British, Mohamedan, or Hindu —but as the outward embodiment, as the temple—nay, even as the goddess mother—of his spiritual culture.... He made India the symbol of his culture; he filled it with his soul. In his consciousness, it was his greater self."

But besides religion, the political experiences of the ancient Hindus also aided them in their conception of the mother country. The unity of a country is easily grasped when it is controlled by a single political authority. The ancient Hindus were familiar with the ideal and institution of paramount sovereignty from very early times. It is indicated by such significant Vedic words as *Ekarāt*, *Samrat*, *Rājādhirāja*, or *Sārvabhauma*, and such Vedic ceremonies as the *Rājasūya*,

¹The British ex-Prime Minister, the Late J. Ramsay MacDonald, in his Introduction to the writer's book, *The Fundamental Unity of India* [Longmans, London].

Vājapeya, or Aśvamedha, which were prescribed for performance by a king who by his digvijaya or conquests made himself the king of kings. Some of the Vedic works and later texts like the Mahabhārata or the Purānas contain even lists of such great kings or emperors. And apart from these prehistoric emperors, there have been several such emperors in historical times, such as Chandragupta Maurva, Asoka, Samudragupta, Harsha, Mihira Bhoja, and, in later times, Akbar and Aurangzeb. Some even performed the horse-sacrifice in declaration of their paramount sovereignty, such as Pushyamitra, Samudragupta, Kumāra-gupta I, Āditvasena and Pulakeśin I. Thus the institution of paramount sovereignty has had a long history in India. Its conception was quite consistent with the ideals set in their sacred works for kings who were encouraged to cherish as quite legitimate and laudable the ambition, which became them as Kshatrivas, of extending the area of their authority up to the limits of their mother country.

The unity of the country also manifests itself in the impress of a distinctive culture stamped upon it. That culture has been developed by its predominant people, the Hindus. numbering nearly 290 millions. The Persians had already defined India as the land of the Hindus, Hindusthan. Indeed, "India and Hinduism are organically related as body and soul" [J. Ramsay MacDonald already cited]. Hinduism has imparted to the whole of India a strong and stable cultural unity that has through the ages stood the shocks of political revolutions, being preserved in its own peculiar system of social self-government functioning apart from, and olfering but few points of contact with, the State, indigenous or foreign. India is predominantly a land of villages, and these villages were recognized as self-governing republics, with a complete apparatus of local institutions for the conservation of indigenous culture, unaffected by political changes at the top or in the central government. What are the characteristic features of this indigenous Indian culture called Hinduism? These are indicated in the indigenous definition of Hinduism as Varnāśrama-dharma, the religion based upon the two-fold division of Varnas (castes) and Astamas (stages of life), the most distinguishing and unifying feature of Hinduism. In its origin, as seen in Vedic literature, it rested on the division of society into four castes or self-contained social groups.

the Brahmana, the Kshatriva, the Vaisva, and the Sudra. These in course of time became subdivided into any number of subcastes. Now the Hindus all over India are divided into hundreds of castes and sub-castes. The principle of the caste-system. which is an outstanding peculiarity of India, is much misunderstood. It chiefly concerns one's private, domestic, and religious life, and not public life. It only interdicts marriage between different castes (mainly on grounds of eugenics) and interdining, especially eating from the same plate or eating the food that has been contaminated by another's touch. Eating is recommended as the individual's private act, an act of prayer to God, "the Giver of our daily bread." But the division into castes is only a part of the Hindu system. The other part is the division of the individual's life into well-defined stages or \bar{A} stramas through which it should pass in its normal course. These \bar{A} stamas are those of (1) the Brahmachāri or the student. (2) the Grihastha or the householder, (3) the Vānaprastha or the hormit, and (4) the Sannyasi or the ascetic absorbed in contemplation. The third stage of life should begin at fifty, when a householder should retire from the world and family life and devote himself to the wider and higher interests of life and to the service of society. The last stage of life is meant as preparation for its end through the severing of all possible earthly ties. As has been already pointed out, Hinduism in its external social aspect is thus made up of two limbs, the caste-system and the asrama-system. Unfortunately, more emphasis has come to be laid on the caste than on the $\bar{a} \pm rama$. Caste divides, and that on the basis of birth. But the asrama system unites, binding all castes in its common rules to lead life along a regulated course of development by natural stages.

The vehicle of this Hindu culture is *Sanskrit*. The unifying influence of Sanskrit can hardly be overstated. This has been well pointed out by Monier Williams [*Hinduisni*, p. 13]: "India, though it has more than five hundred spoken dialects, has only one sacred language, and only one sacred literature, accepted and revered by all adherents of Hinduism alike, however diverse in race, dialect, rank, and creed. That language is Sanskrit and that literature is Sanskrit literature—the only repository of the Veda or 'knowledge' in its widest sense; the only vehicle of Hindu theology, philosophy, law,

and mythology; the only mirror in which all the creeds, opinions, customs, and usages of the Hindus are faithfully reflected; and (if we may be allowed a fourth metaphor) the only quarry whence the requisite materials may be obtained for improving the vernaculars or for expressing important religious and scientific ideas."

This distinctive Indian culture in course of time so far unified the country that the country and the culture came to be identified and became synonymous terms. The country was the culture and the culture the country, the kingdom of the spirit, transcending territorial limits. Since its introduction to India at the time of the Rigveda, this Indo-Aryan culture gradually spread through the ages in ever-widening circles and regions known successively as Sapta-Sindhu, Brahmarshideśa, Bruhmavarta, Madhyadeśa, Āryāvarta, Jambudvīpa, or Bhāratavarsha, till in its abounding vitality it ultimately travelled bevond the limits of India to other lands and built up a Greater India beyond her boundaries across the seas. Indian thought and institutions are to this day traced in literature, monuments, folk-lore, tradition, manners and customs still extant in countries like Siam and Cambodia on the mainland, and in the islands of Java, Sumatra, Bali, and Borneo, as a result of the work of Indian colonists. Some of these countries have even received their religion from India : Tibet, Nepal, China, following Mahāyāna Buddhism, and Burma, Ceylon, Siam, and Cambodia adopting Hinayana Buddhism. Colonization springs from an active and aggressive nationalism fed by the consciousness of a common mother country and of its distinctive culture.

Effects on History.—In spite of this fundamental unity of India, the vastness of its size and the variety of its physical features and social conditions produced their own natural consequences to its history and political development. It has been aiways difficult to organize the whole of India as a unit and have it governed from one centre under a common sovereign or political authority. The result has been that what may be strictly called Indian History as an organic whole or a unified development, like English History, or the History of France, has been rarely achieved. More often the history of India has resolved itself into a number of subsidiary, subordinate, and unconnected histories, without continuing as a common history

for the whole of India. Instead of developing from one centre under a common direction, it has developed very often from different, and even mutually independent centres, losing its unity in the variety of separate and local histories of different peoples and regions, evolving along their own independent lines, and offering but few points of contact or agreement, and more of conflict between them. Thus the political history of India has to be often traced and studied in parts and fragments. in interruptions and isolated restorations, and in many missing links. It has been shaped through the ages by so many different peoples and governments such as Maurya, Kushan, Andhra, Gupta, or Gurjara, for the north, and Pallava, Chālukya, or Chola in the south, or Muslim, Marāthā, Sikh, and British in later times, functioning from different and changing centres like Pataliputra, Purushapura, Paithan, Nasik, Ujjain, Kanauj, Bādāmi, Kanchi, Kalvān, and Tanjore; or Delhi, Pocna, Lahore, and Calcutta, the headquarters of different political authorities in different epochs of Indian History. It was only once in Hindu India that the whole of India had a common history under the control of a common government. the Maurya empire under Asoka who made his authority felt all over the country, and even Afghanistan and Baluchistan up to Persia as parts of an extended India, of which he became the paramount sovereign.

It must, however, be noted that, apart from its size, the conditions of ancient times, the difficulties of communication in the pre-mechanical ages, which have now yielded to the power derived from coal, electricity, or oil, did not permit the establishment of a large empire or a centralized administration. A government to be effective, to get its authority habitually obeyed in the different and distant parts of its large area, had to be very much decentralized, giving full scope to local selfgovernment. Thus there was inevitably more of local life and history throwing into background the general life and history of India. Indian history thus becomes a mere collection of local and disconnected histories and but seldom the record of one common political development affecting India as a whole.

These physical conditions have, however, given way to human ingenuity. India, after her attainment of freedom, has been free to build herself up as a unitary republican federa-

tion in which have been merged as its integral parts all the different Provinces and the Indian States of British India. Although India has attained her freedom at the cost of her partition which has lost her all the territory that has been formed into the separate State of Pakistan, with its rich resources. she has obtained some compensation from this process of integration bringing to her fresh accessions of territory, revenue, resources, and population. Thus the loss caused by partition has been somewhat made up by this integration by which India has been now organised for the first time in her long history as a unit or a Union by her republican constitution bringing together under a common, central, sovereign authority different states that had so long functioned as autonomous administrations. The Union of India as a Member of United Nations Organisation has had her international status considerably enhanced by the domestic and foreign policy so appropriately evolved and vigorously pursued by Free India's first Prime Minister, Jawaharlal Nehru, under her first President. Dr. Rajendra Prasad. The unity of India is now no longer a dream or an ideal but an accomplished fact, a political reality embodied in her Constitution.

It is, however, to be noted that behind this diversity of local history there has always been in the background a kind of an all-India history which is from the nature of the case not political, but cultural in its character, the history of thought which transcends local limits and administrative boundaries. The whole of India bears the impress of certain common movements of thought and life, resulting in the development of certain common ideals and institutions which distinguish the civilization of India from all other civilizations of the world, and marks it out "as a unit in the history of the social, religious, and intellectual development of mankind" [V. A. Smith's *Early History of India*, 4th ed., p. 5].

CHAPTER IV

THE ARYANS IN INDIA : RIGVEDIC CIVILIZATION

Rigveda on Aryan Origins.—The history of India is generally taken to be the history of the Aryans in India. It thus begins with the advent of the Aryans to India. Its earliest source is the work known as the *Rigveda-Sanihitā*, which is the earliest work not only of the Indo-Aryans, but of the entire Aryan race. The work thus throws light not only on the beginnings of Aryan history in India, but on Aryan history elsewhere, on prehistoric phases of language (such as inflexion, accent, and metre), of religion, and of civilization in general.

Common Aryan Language and Home.—Linguists have found that the language of the *Rigveda* shows its affinity in forms of grammar and roots of verbs to Persian, Greek, Latin, Teutonic, Celtic, and Slavonic, as if they are descendants of a common ancestor. They have in common words expressive of primary relationship or experience in life such as those for father, mother, son, daughter, God, heart and tears, axe and tree, dog and cow; e.g. Sanskrit $M\bar{a}tar$, Latin Matar, English Mother; Sanskrit $S\bar{u}nu$, Lithuanian $S\bar{u}n\bar{u}$, old High German Sunu, English Son.

This linguistic evidence is evidence of some important primitive history. The languages thus related point to their common origin from a common language spoken in a common home by the ancestors of their present speakers. The speakers of these languages became separate peoples migrating from their original common home, but their ancestors were one / Aryan people whom we may call the Wiros after the word Wiros for men occurring in the majority of the languages in question.

The question is, Where was this original Aryan home, the country of the Wiros? It can only be inferred from certain data found in these Indo-European or Indo-Germanic languages. Firstly, the Wiros did not live in an island or even near the *sea*, for which they had no word. Secondly, they lived in a temperate climate, knowing the oak, the beech, the willow, and some coniferous trees. Thirdly, they were a settled people, growing corn with the care of months, domesticating animals like the ox and cow, sheep and horse, dog and pig, but not the ass, or camel, or elephant. The horse and the cow, again, point to diverse conditions. The horse is a native of the open plain with its foal following the mother in her wanderings. But the cow must keep close to its calf in its grazings. Thus the original Aryan home must have had a combination of pastoral and agricultural conditions, horsebreeding steppes and high ground for pasturing of sheep.

According to Dr. P. Giles [Cambridge History of India Vol. I, chap. iii], these data for flora and fauna should rule out the following places suggested for the common Aryan home: (1) India, (2) the Pāmirs, a notoriously inhospitable region for early settlement, (3) the northern plains of Europe which in early times were too densely forested, (4) the southern steppes of Russia, or (5) the Arctic regions. He would suggest for it the region in Europe now comprising Hungary, / Austria, and Bohemia.

Aryan Migrations.—The Aryans who migrated from this original home towards the east (with whom Indian history is concerned) in search of fresh fields and pastures new must have followed the easy route along the Danube to Wallachia and further south towards the Bosphorus and the Dardanelks. Crossing these and the Plateau of Asia Minor, they must have struck the upper waters of the Euphrates and Tigris, avoiding the region between them as the then seat of a powerful civilization, before they reached Persia by the route between Tabriz and Tehran, or proceeded farther towards Mashad, Herat, and Bactria.

Similarity between Rigveda and Avesta.—In this region lived those Aryans who were the ancestors of the Indians and Irānians. Accordingly, their respective religious books, the *Rigveda* and the *Avesta*, show closer affinity in language and thought than with Greek, Latin, or other Indo-Germanic works. "Not only single words and phrases but even whole stanzas may be transliterated from the dialect of India into the dialects of Irān without change of vocabulary or construction" [*ibid.*, p. 74]. This may be illustrated by the following examples:—

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	I. STANZA
Avestan	Vcdic Equivalent
Tat thwā	Tat tvā
perša ers	prichchhā
moī vochā	riju ma
Ahurā	vach Asura
Tā Chīt	Tā Chit
Mazdā	medhishtha
vašmī	Vashmi
anyāchā	anyāchā
vidye	vide
	2. Gods
Avestan	<i>Vedic</i>
Indra	Indra
Vāyu	Vāyu
Mithra	Mitra
Nāonhaithya	INāsatya
Verethraghna	Vritraghna

It will thus be seen that the ancestors of the Hindus and the Persians had lived longer together than their other Aryan kinsmen who had migrated towards the west. They were probably the last to leave the original Aryan home because their language carried off the largest share of the common Aryan inheritance as traced in roots, grammar, words, myths, and legends.

Age of Rigveda: Foreign and Indian evidence.—The question now is, What was the probable age of these momentous migrations? An unexpected light comes from a source outside India. Some inscriptions of about 1400 B.C. discovered at Boghaz-Koi in Asia Minor recording contracts concluded between the king of the *Hittites* and the king of *Mittāni* mention some gods as protectors of these contracts, whose names are thus given :—

"ilāni Mi-it-ra aś-śi-il (ilāni) U-ru-w-na-aś-śi-il (ilu) Indar (ilūni) Na-śa-a (t-ti-ia-a) n-na...." The names are considered to correspond to the names of the Rigvedic gods, Mitra, Varuna, Indra, and the two Nāsatyas. As these gods are also known to Avesta, some scholars think they were the common gods of the undivided Aryan people prior to their separation as Indians and Irānians. But the spelling of the names in the Mesopotamian inscription points clearly to their Rigvedic origin. In that case, we must assume that the Rigveda and its culture must have established themselves in India much earlier than 1400 B.C. to have been able to influence the culture of Asia Minor at that time.

Of the same time as the Boghaz-Koi inscriptions are the famous letters from Tel el-Amarna in which some Mittāni princes are mentioned with names of Sanskrit form, such as Ārtatama, Tusratta, and Suttarna. Some of the princes of the Kassites, too, who ruled over Babylonia between c. 1746-1180 B.C., also bear Sanskritic names like Shurias (Sūrya), Marytas (Vedic Marutas), etc. In the library of Assurbanipal of about 700 B.C. was found a list of deities worshipped in Assyria, which includes the name Assara-Mazas equivalent to Avestan chief god, Ahura-Mazda, though the form Assara is nearer Sanskrit Asura than Avestan Ahura.

The same antiquity of the Aryan migration to India and of the *Rigveda* is pointed to by Indian literary evidence. If Buddhism rose in India in c. 600 B.C., the Brahminical literature and culture it presupposes must be of earlier age. We have to allow for adequate time for the growth of such different types of Brahminical literature as the Sūtras, the Āraŋyakas, the Upanishads, the Brāhmaņas, the four Vedic Samhitās preceded by the original material which was later edited in the *Rigveda-Samhitā*. On a modest computation, we should come to 2500 B.C. as the time of the *Rigveda*.

The Rigveda reveals an advanced Civilization.—The Rigveda itself, however, does not contain a single allusion to these migrations. It points to a settled people, an organized society, and a full-grown civilization. According to the orthodox Hindu view, the Rigveda shows not the early streak or dawn of Indian culture but rather its zenith. It is like Minerva born in panoply. The Rigveda is the root, of the entire tree of Hindu Thought with its ramifications into so many sects, schools of philosophy, and systems of worship. It is still the only acknowledged source of prayers like the Gäyatrī mautram which is uttered verbatim to this day by millions of Hindus believing in the mystical potency of every accent, syllable, and word it contains, and forbidding its replacement by any other human composition.

Rigvedic India : Its rivers, scenery, and peoples.--We sec in the *Rigveda* the Arvans already in possession of a wide extent of territory in which they worked out their destiny and culture. The limits of Rigvedic India are indicated by certain geographical details found in the *Rigveda*. On the west are mentioned the rivers Kubhā (Kabul), Krumu (Kurrum), Gomati (Gomal), Suvāstu (Swāt), pointing to the Indian occupation of Afghanistan in those days. Next are mentioned the five rivers of the Punjab-Sindhu (Indus), Vitasta (Jheelum), Asiknī (Chenab), Parushnī (Irāvatī or Rāvi), Vipāś (Beas), as also Sutudri (Sutlej) and Sarasvatī (Sarsūti). The Yamunā and the Gangā are also mentioned. A part of the *Rigveda*, the hymns to Ushas, recalls the splendours of dawn in the Punjab, but a larger part refers to the strife of the elements, thunder and lightning, rain bursting from the clouds, and mountains, which are not seen in the Punjab, but in the region called Brahmāvarta watered by the Sarasvatī, the Drishadvati and the Apaya, where the bulk of the Rigveda must have been composed.

The whole of this territory was divided up among a number of Vedic peoples, the more important of which are named as the Gandhāris (noted for their woollen industry). the Mūjavants (on the south bank of the Kubhā), the Anus, Druhyus, and Turvaśas (along the course of the Parushuī), the Pūrus and the Bharatas of Madhyadeśa.

Its political evolution : Battle of Ten Kings .- The process of political unification of Rigvedic India was already in 1 full swing. The Rigueda tells of the Battle of Ten Kings, Dasa-rajña [vii, 33, 2, 5; 83, 8], against Sudas, King of the Bharatas, which was a contest for supremacy between the peoples of the earlier settlements of the north-west and of the later ones of Brahmayarta. It appears that the whole of Rigvedic India including the non-Aryan peoples was involved in this great Vedic war. There were five peoples to the west of the Indus, the Alinas (of modern Kafiristan), the Pakthas (recalling Afghan Pakthun), the Bhalānases (probably of the Bolan Pass), the Sivas (from the Indus) and the Vishāņins. There were also the five peoples of the interior, viz. the Anus, the Druhyus, the Turvasas, the Yadus, and the Purus. The Coalition also comprised three eastern peoples on the Yamuna. who are believed to have been non-Aryans, viz. the Ajas, Sigrus, and Yakshus, led by their leader Bheda. Another non-Aryan king in the Coalition was Simyu. Other Aryan kings mentioned were Kavasha, Sambara, and the two Vaikarnas who themselves brought into the Coalition their following of twentyone peoples. The Rishis as Purohitas or royal preceptors figure as leaders in this war. <u>Viśvāmitra was leading the</u> <u>Coalition against Sudās who was following Vasishtha</u>. The Anus were led by the Bhrigus. The victory of Sudās established his overlordship in Rigvedic India.

Among other Rigvedic peoples of importance, along with the Bharatas, may be mentioned the Pūrus who with the Bharatas became later merged in the Kurus, the Krivis allied to them, and the Sriñjayas.

This struggle for supremacy among the different Aryan peoples was a part of the evolutionary process tending towards the formation of larger political aggregates and the unification of Rigvedic India under a paramount sovereign or overlord. A no less important part of that process was the achievement of Aryan supremacy over the aboriginal peoples, the non-Aryans. Glimpses of this fundamental conflict between the Aryan and the non-Aryan are amply given in the *Rigveda*. The causes of the conflict were both cultural and political.

The non-Aryan in Rigveda.— The Rigveda calls the non-Aryan as Dāsa, Dasyu, or Asura. Individual non-Aryan chiefs are named, such as Ilibisa, Dhuni, Chumuri, Pipru. Varchin, and śambara, and non-Aryan peoples, the śimyus. Kikatas, Ajas, Yakshus, and śigrus already referred to. In Rigveda, i, 133, 4, there is a reference to ruddy Piśāchas and Rākshasas uttering fearful yells in battle.

The distinction between the Aryan and the non-Aryan is also defined. It is both physical and cultural. The non-Aryan is dark-skinned as well as noseless (anāsa) or snub-nosed (like the Dravidian). He is (1) of hostile speech (mridhravāk), i.e. speaking a language radically different from Vedic Sanskrit; (2) devoid of Vedic rituals (akarman); (3) not worshipping the Vedic gods (adevayu); (4) devoid of devotion (abrahman); (5) non-sacrificing (ayajvan); (6) lawless (aviata); (7) follower of strange ordinances (anyaviata); (8) a reviler of 1

Vedic gods ($devap\bar{i}yu$); and (9) a phallus-worshipper ($\hat{s}i\hat{s}nadevah$)¹ [vii, 21, 5; x, 99, 3].

The Aryans drove the non-Aryans to forests and mountain fastnesses or made them slaves. The *dāsī* or female slave is frequently referred to in Vcdic literature. In the *Rigveda*, in its famous Purushasūkta describing the creation of the four castes out of the universal body of the Lord (*Virātpurusha*), the fourth caste is formed by the Sūdra, including the slaves. There was also inevitably at work a process of fusion between the Aryan and the non-Aryan by inter-marriage or by alliance. Instances of such alliance wcre seen in the Battle of Ten Kings

¹ Some of these epithets are also applied to Aryans. In Rv, vii, 83, 7, all the ten kings and their allies who were the enemies of Sudās are branded "non-sacrificers" (ayajyavah) and in vii, 18, 16, as animdra, "not worshipping Indra." In another passage, vii, 104, 14-15, Rishi Vasishtha himself is condemned as "worshipping false gods" (anritadevah). From these data and the other fact that the Coalition against Sudās included non-Aryan cluefs and peoples, Raj Bahadur R. P. Chanda concludes that Rigyedic history is concerned more with the civil wars among the Aryans or Indraworshipping kings and clans than with the supposed wars between the Aryans and non-Aryans and that the age of the Rigveda was not one of migrations and conflict with the aborigines but an age when the Arva and the Dasa had already been reconciled to each other as citizens of a common mother country. His further conclusions, which are controversial, are : (1) That the religion of the Rishis, worshippers of Indra, Varuna, Agni, and other gods, was accepted by the kings and the people of the Indus Valley whose culture and civilization were then in decline. (2) That the Vedic Kshatriya clans like the Bharatas, Pūrus, Yadus, Turvasas, Anus, Druhyus, and the like were the representatives of the indigenous chalcolithic population. (3) That there was a fundamental cultural difference between the Rishi or the Brahman, and the Kshatriya or other castes favouring human sacrifice, anumarana (custom of the Sali) and other customs, contrary to Brahmin usage. (4) That the diversity of castes was thus due to that of cultures. (5) That the contact between Vedism and the indigenous religion of the Indus Valley modified both (a) by making the cult of yoga acceptable to Vedism, which formerly believed only in sacrifice, and (b) by the retention of non-Vedic elements in popular religion. As to the cult of yoga, its indigenous origin is seen in certain stone statucttes discovered at Mohenjo-daro showing ascetics with eyes half-shut in contemplation and fixed on the tip of the nose. These, according to Mr. Chanda, supply the missing links between the prehistoric Indus Valley civilization and the later civilization of India, Buddhist, Jain or Brahmanical [Memoir No. 41 of Arch. Survey]. already described. Thus the Aryan had to face a three-fold mission in India, to conquer, to colonize, and to civilize. He had to subdue or to assimilate the aboriginal element.

But the overthrow of the black skin was by no means an easy task for the Aryan. The non-Aryan of the *Rigveda* was fully fortified in the strongholds of his own civilization which was materially quite advanced. The *Rigveda* tells of his towns and forts *Apura* and *durga* [i, 41, 3]) made of iron ($\bar{a}yasi$ in ii, 58, 8) or stone (*aśmamayi* in iv, 30, 20); of forts "broad" (*prithvi*) and "wide" (*urvi* in i, 189, 2) and "full of kine" (*gomati* in *Av.*, viii, 6, 23); to forts of hundred pillars (*śatchhuji* in *Rv.*, i, 166, 8; vii, 15, 14); and to autumnal (*śārudī*) forts as refuge against inundations.

Remnants of this civilization are traced in the ruins of cities unearthed at Harappa and Mohenjo-daro already described. The Principal non-Aryan opponents of the Aryan in the Rigveda are the Panis, a merchant people according to Yāska (*Nurukta*, vi, 27), who must have been the builders of this commercial civilization of the Indus Valley, of which many of the antiquities unearthed are coins and articles of conch-shell derived from sea-trade. Thus the Aryans had to contend against an advanced civilization in the Indus Valley¹ with its many cities which they had to reduce. Accordingly, their god, Indra, was called *Purandara*, "sacker of cities."² (Rv_r , i, 103, 3).

A few select passages of the *Rigveda* will throw light on this Aryan-non-Aryan conflict. In i, 174, 7-8, the earth is described as the burial-ground of the *Dāsas*; ii, 20, 6-7 describes Indra storming towns and destroying the troops of the black *Dāsas*; iv, 16, 13, refers to the slaughter of 50,000 blackcomplexioned enemies on the battle-field, and iv, 30, 21, to the slaughter of 20,000 *Dāsas*; i, 53, 8, refers to the blockade

¹ That the *Rigveda* knew of a civilization existing in the region south of the Punjab is perhaps indicated by a solitary passage, vi, 20, 12 (repeated in i, 174, 9), in which it is stated that Indra safely brought Turvaśa and Yadu over the *samudra* or sea. This shows that while most of the Rigvedic peoples hailed from the north-west, the Yadus and Turvaśas were immigrants from the south and considered worthy of admission to the society of the Aryas [Rai Bahadur] R. P. Chanda in *Memoir No.* 31 of Arch. Survey of India].

2 Ibid.

of 100 cities of the non-Aryan Vangrida by Rijiśvan in his fight against the "dusky brood" (krishnagarbhāh). Many passages refer to the destruction of the forts of the Dāsa Highlander Śambara, of which the number is given as 90 [i, 130, 7], 99 [ii, 19, 6], and 100 [ii, 14, 6]. The Aryan prayer to Indra in x, 22, 8, sums up the situation thus : "We are surrounded on all sides by Dasyu tribes. They do not perform sacrifices; they do not believe in anything; their cities are different; they are not men ! O destroyer of foes ! Kill them. Destroy the Dāsa race !"

Society : Marriage and Family. Rigvedic society was well organized. Its unit was the family which was patriarchal.
It was primarily monogamic, while polyandry was unknown. The husband was the master of the household with his wife as its mistress. Sexual morality was very high. Incest, or marriage between father and daughter or between brother and sister, was not permitted. Child marriage was also unknown, though usual in later times [x, 85, 21-2]. Freedom of choice in marriage was given [x, 27, 12]. Girls lived under the protection of their parents, and, after their death, of their brothers [ii, 17, 7, and iv, 5, 5].

Dowry at marriage was usual [i, 109, 2]. The Rigvedic Marriage Hymn, x, 85, shows that the bride after marriage was conveyed from the house of her father to that of her husband and that in her new home she had an honoured place as mistress with authority over her aged father-in-law, motherin-law, her husband's brothers and sisters. It also shows that Vedic marriage was indissoluble by human action and that the re-marriage of a widow was not contemplated, though there is a reference |x, 40, 2| to the widow married to the brother of her husband who died without issue. The wife was the husband's partner at religious ceremonies [viii, 31].

Inheritance. The father's property was inherited by his son and not by his daughter, unless she was the only issue [iii, 31]. The right of adoption was recognized [vii, 4, 7.8]

Property. The right of property was known. It was allowed in movable things like cattle, horses, gold, ornaments, and slaves. It was also allowed in land which was divided into different fields carefully measured off, called *kshetra*, with strips of land between them held in common and called *khulyas* [x, 33, 6; i, 110, 5; vi, 28, 2; x, 142, 3].

Economic Life : Pasture and Agriculture. Economic life centred round the cattle. Bulls and oxen served for ploughing and drawing carts. Horses were used to draw the chariot and also for races. Other animals domesticated were sheep, goats, asses, and dogs used for hunting, for guarding and tracking cattle, and for keeping watch at pight [iv, 15, 6; viii, 22, 2; vii, 55, 3].

The cattle grazed on pastures called *Goshtha* [i, 191, 4] under the herdsman, Gopāla, armed with a goad [x, 60, 3], who had to see that they did not fall into pits, or break limbs, or were not lost or stolen. There were forays for cattle, *Gavishti* [i, 91, 23]. The ears of cattle were marked for ownership [vi, 28, 3].

The *Rigveda* attached great importance to agriculture $(K_{I}ishi)$ which in the *Paāchavimša Brāhmaņa* [xvii, 1] distinguishes the *Arya* from the *Vrātya*, i.e. a Hindu outside the pale of Brahminism.

The plough land was called $urvar\bar{a}$ or kshetra. The plough was drawn by oxen in teams of six, eight or even twelve [Rv., viii, 6, 48; x, 101, 4]. The ripe grain was cut with a sickle $(d\bar{a}tra, srini)$, collected in bundles (parsha) [viii, 78, 10; x, 101, 3,; 131, 2] and beaten out on the floor of the granary (khala) [x, 48, 7]. The grain was then separated from the chaff by a sieve (titau) or a winnowing fan (surpa) [x, 71, 2]. The winnower was called $Dh\bar{a}nya$ -Krit [x, 94, 13] and the grain was measured in a vessel called Urdara [ii, 14, 11].

There was also use of manure called *Sakan* or *Karīsha*. The agricultural operations are neatly summed up as "ploughing, sowing, reaping, and threshing" ($K_{Tishantah}$, vapanlah, *lunantah*, *and* $m_{Tinantah}$) in *Satapatha Brāhmaņa* [i, 6, 1, 3].

Irrigation. There is mention of wells for men and wells for cattle [x, 101, 7]. Water was drawn out of a well in buckets (kosa) tied to leather strings ($varatr\bar{a}$) pulled round a stonepulley, asmachakra [Ib., 5-6]. The water thus raised was led off into broad channels ($s\bar{u}rm\bar{s}$ ushir \bar{a}) for irrigation [viii, 60, 12]. The water for irrigation also came from lakes (hrada) and canals ($kuly\bar{a}$) [iii, 45, 3; x, 99, 4]. 1

Pests. Agricultural pests such as insects, birds and locusts are mentioned [x, 63, 1]. Excess of rain or drought is mentioned as damaging the crops [cf. *Alharvaveda*, vi, 50, 142].

Grain. The grain grown is called yava and dhānya [i, 117, 21; vi, 13, 4]. The later Vedic work, Brihadāranyaka Upanishad [vi, 3, 22], mentions ten cultivated (grāmyāni)kinds of grain; rice and barley (vrīhiyavak), sesamum and beans (tila-māshāk), maize (godhūmāk), lentils (masūrak), and the like.

Wealth. Wealth was counted in cattle [v, 4, 11], in horses [vi, 41, 5], in heroes $(v\bar{v}ra)$ or "good sons" [ii, 11, 13].

Hunting. Besides pastoral pursuits and agriculture, the Rigvedic Indians indulged in hunting for livelihood, sport and protection of flock from wild beasts. The means employed included the arrow [ii, 43, 2], nets called $p\bar{a}\dot{s}a$ [iii, 45, 1], Nidha [ix, 83, 4], $J\bar{a}la$ [Av., x, 1, 30], or Mukshijā [i, 125, 2] used by the fowler called Nidhā-pati [ix, 83, 4]. Antelopes ($\tau i \dot{s} y a$) were caught in pits called $\tau i \dot{s} y a - d\bar{a}$ [x, 39, 8]. The boar was chased with dogs [x, 86, 4], and the buffalo (Gaura) by a lasso [x, 81, 6]). The lion was captured in pitfalls [x, 28, 10] or caught by ambuscade and led into a hidden pit [v, 74, 4] or surrounded and slain by hunters [v, 15, 3]. Wild elephants were captured by tame ones [viii, 2, 6].

Handicrafts. The carpenter, takshan [ix, 112, 1], was foremost, making the chariot, ratha, for war or sport, as also the draft wagon, anas [iii, 33, 9], which had sometimes a covering, chhadis [x, 85, 10]. He worked with the axe, paraśu, as his tool [i, 105, 18], and also produced fine carved work [x, 86, 5]. Next came the worker in metal, karmāra [x, 72, 2], who smelted the ore in fire (dhmātri in v, 9, 5), using bellows of birds' feathers [ix, 112, 2], and made vessels of metal (gharma ayasmaya in v, 30, 15) and also of hammered metal (ayo-hata in ix, 1, 2). The goldsmith, hiranyakāra, made ornaments of gold, hiranya [i, 122, 2]. The gold was derived from the bed of the river like the Indus, a "golden stream" [vi, 61, 7], and also from the earth [i, 117, 5]. The leatherer made articles of leather like bowstring, slings, thongs to fasten parts of the chariot, reins, lash of the whip, or bags. The art of tanning leather was also known [Vedic Index, i, 234, 257]. There was also the weaver called $V\bar{a}ya$, [Rv., x, 26, 6] working with his loom called veman. The shuttle used for weaving was called *tasara*. The warp was called otu and the woof *tantu* [vi, 9, 2]. Weaving was generally left to women [i, 92, 3]. We may note an interesting passage [ix, 122] referring to the father of a Rishi being a physician (bhishaj) and his mother a grinder of corn (upala-prakshini).

Trade and Money. The trader, Vanik, was known to the *Rigveda* [i, 122, 11]. Barter was in vogue: ten cows are quoted as price for an image of Indra [iv, 24, 10]. The haggling of the market was known as well as the obligation of a contract: "One sells a large quantity for a small price and then goes to the purchaser and denies the sale and asks for a higher price. But he cannot exceed the price once fixed on the plea that he has given a large quantity. Whether the price was adequate or inadequate, the price fixed at the time of sale must hold good" [iv, 24, 9]. The conception of money may be traced in the mention of a gift of 100 *nishkas* and 100 steeds [i, 126, 2]. Indebtedness was known [ii, 27, 4]. It was chiefly due to dicing [x, 34, 10]. There is mention of an eighth and a sixteenth being paid either as interest or part of the principal [viii, 47, 17].

Sea-borne trade was known. Samudro is unmistakably used in the sense of ocean in Rv., vii, 95, 2. There are references to the treasures of the ocean [i, 47, 6: vii, 6, 7; ix, 97, 44], perhaps pearls or the gains of trade [i, 48, 3; 56, 2; iv, 55, 6] and the story of Bhujyu, being shipwrecked on the main "where there is no support, no rest for foot or hand", and rescued in a hundred-oared galley, points to marine navigation [i, 116, 3].

Dress. The dress of the people ($v\bar{a}sas$ in i, 34, 1; also called *vasana* [i, 95, 7] and *vastra* [i, 26, 17]) consisted of the under-garment ($n\bar{n}vi$), a garment, and an overgarment called *adhīvāsa* [i, 140, 9]. It was generally woven of sheep's wool, called $\bar{u}nn\bar{a}$ [iv, 22, 2], for which the Parushnī country was famous (*ib*), as Gandhāra was for its sheep [i, 126, 7]. There are also references to embroidered garments called *peśas* [ii, 3,

6] made by the female embroiderer ($pe\bar{s}as-k\bar{a}r\bar{s}$), and also to mantles adorned with gold ($hiranyay\bar{a}n atk\bar{a}n$ in v, 55, 6). Ascetics wore skins called *ajina* [i, 166, 10] or *mala* [x, 136, 2].

Ornaments. Ornaments of gold were used by both sexes, such as ear-rings, karna-sobhana [viii, 78, 3], necklaces (*nishkagrīva* in ii, 33, 10), bracelets and anklets, $kh\bar{a}di$ [i, 166, 9, and v, 54, 11], and garlands (*rukma-vaksha*). Jewels were also worn (*manigrīva*, "with bejewelled neck," in i, 122, 14).

The hair was combed and oiled. Women wore it plaited. Sometimes men wore it in coils. The Vasishthas had it coiled on the right [i, 173, 6; vii, 33, 1]. There is mention of a maiden wearing her hair in four plaits (*chatush-kapardā*, in x, 114, 3). Beard was worn (*śmaśru* in ii, 11, 17) but shaving was also practised. There is mention of razors (*kshuta*) sharpened on stone [viii, 4, 16]. The barber was called a *vaptā* [x, 142, 4].

Food and Drink. Milk was the most important food [kshīra in i, 109, 3], together with its products, butter [ghrita, i, 134, 6] and curd [dadhi, viii, 2, 9]. There is also mention of "mess of grain cooked with milk" (kshīra-pākamodanam) and of a kind of cheese [vi, 48, 18]. Cake of rice or barley was eaten mixed with ghee [x, 45, 9]. Porridge was also made of grain (yava) which was unhusked parched and then kneaded [i, 187, 16]. As regards meat, it was generally that of the animals which were sacrificed, viz, sheep and goats. The cow was already deemed aghnya, "not to be killed" [vii, 101, 15-16]. Spirituous liquor, surā, was condemned [vii, 86, 6]. It gave rise to broils in the sabhā or assembly [viii, 2, 12]. There was also the some drink as a religious offering extolled in the entire ninth mandala of the Rigveda and in six other hymns. The plant grew on the mountains like the Mujavants [i, 93. 6], or in the country of the Kikatas, [iii, 53, 4]. It was treated to an elaborate process the details of which it is difficult to follow. It was placed on a skin, lvak [ix, 65, 25], and on a vedi or dhishand [i, 109, 3], platform, and then pressed with stones, or with pestle (mantha) in a mortar (ulūkhala) [i, 28] to yield its juice which was received in a chamū [ix, 99, 8], the cup for the gods, or in kalasa and chamasa, the cups for the priests. Sometimes it was steeped in water $(\bar{a}py\bar{a}yana)$ to yield more juice [ix, 74, 9]. The plant has been sought to be identified as the Afghan grape or the sugar-cane or a species of hop, but not with certainty. Its exhilarating and exciting effects are alluded to [viii, 18].

These included chariot-racing, horse-Amusements racing, dicing, dancing, and music. The race was called aji [v, 37, 7], the race-course, kāshihā [viii, 80, 8] or sapiya [viii, 41, 4], and was broad, urvi, and of measured distance [viii, 80, 8]. Vispalā was the name of a swift steed or racer i, 116, 5]. Dicing, aksha [i, 41, 9], was played with stakes. vij [i, 92, 10], and led to ruin and slavery for paving the debts incurred [x, 34, 2]. The gambling son was chastised by his father [ii, 29, 5]. Dancing was indulged in by both sexes to the accompaniment of music from cymbal $(\bar{a}gh\bar{a}ti)$ [x, 146, 2], and the three types of musical instrument, operated by percussion, string, and wind, were already known, viz. the drum, dundubhi [i, 28, 5], lute, karkari [ii, 43, 3]. or lyre or harp, vāna, with its seven notes recognized and distinguished [x, 32, 4], and the flute (of reed) called nadi [x, 135. 7].

Polity. The political evolution of Rigvedic India may be traced in the following ascending series of formations or groups :--

- (1) The Family (Griha or Kula).
- (2) The Village (Grāma).
- (3) The Canton or Clan (Vis).
- (4) The People (Jana).
- (5) The Country (Rāshtra).

Family. The unit of social formation was the family comprising several members living under a common head, the father, or eldest brother, called the *Kulapa* [x, 179, 2], in the same house called *Griha* [iii, 53, 6; ii, 42, 3], which was large enough to accommodate not merely the entire undivided family but also their cattle [vii, 56, 16] and sheep [x, 106, 5] at night, returning from their grazing grounds, *vraja* [ii, 38, 8]. The house with its several rooms could be shut up [vii, 85, 6].

Village. An aggregate of several families made up the Grama [i, 44, 10] or village, which is contrasted with the forest, *aranya*, with its wild animals and plants [x, 90, 8]. The

term grama was sometimes used to denote the village folk [gavyam gramal, "the horde seeking cows," in iii, 33, 11]. A village had its head man called Graman [x, 62, 11; 107, 5].

Clan. The next larger formation was called the Vis [iv, 4, 3; 37, 1], implying a settlement, from the root vis, to "enter" or "settle", under the head called Vispatī [i, 37, 8]. It is, however, difficult to state whether the Vis of the Rigveda was a local subdivision, a canton, or a blood-kinship like a clan, and in what exact relation it stood to the Grāma or to Kula and Gotra.

The people (Jana). Larger than the Viś was the Jana [x, 84, 2]. In ii, 26, 3 we have the series—"Putra, Janma, Viś, and Jana," "family, canton, or clan, and the people." In x, 91, 2, the G_fiha or family is contrasted with the Viś and Jana. Regarding Jana, we have mention of the famous five peoples, "pañcha janāh," and of the peoples called the Yadus [Yādva-janāh, Yādvāh in viii, 46, 48] and the Bharatas [Bhārata-jana in iii, 53, 12]. The king is also called the protector of the Jana or people [Goptā janasya in iii, 43, 5].

The Country. The term for the country or kingdom was $R\bar{a}shtha$ [iv, 42, 1].^a

The King. The Vedic kingship was the natural outcome of the conditions surrounding the Aryans as invaders in a hostile country. "War begat the king" in Vedic, as in Teutonic, history generally. *Rigveda*, x, 124, 8, refers to the sad plight of a people not choosing a king to lead them against the enemy. The king was thus the leader in person of war of aggression and also in defence. He was called "the protector of the people" (*Goptā janasya*), as we have already seen, and a "sacker of cities" (*purām bhettā*).

In return for these services, he received the obedience of his people, sometimes voluntary, but sometimes compelled [ix, 7, 5,] and also contributions made by them for the maintenance of royalty [called *bali* (i, 64, 4)]; *bali-hrit*, "receiving

¹ A few other political formations are indicated in the terms $Vr\bar{a}japati$, who is described as being attended by the family heads, Kulapas, like the leader of the village contingent of the clan [x, 179, 2], and Sardha, $Vr\bar{a}ta$, and Gana, used to denote a Vedic host, fighting "according to clan, village, and family" [v, 53, 11].

tribute," in vii, 6, 5, and x, 173, 6]. Tribute also came to the king from hostile tribes subdued [vii, 6, 5; 18, 19].

In return he performed the duties of judge, probably as a court of final appeal in civil justice, while in criminal justice he exercised a wide jurisdiction [i, 25, 13; iv, 4, 3]. Himself above punishment (adandya), he wielded the rod of punishment (danda) as the chief executive of the people, employing spies for his work [viii, 47, 11].

The marks of royalty were the pomp of dress [i, 85, 8], the possession of a palace [ii, 41, 5], and of a retinue. There is mention of palaces with 1,900 pillars [ii, 41, 5] and 1,000 portals [vii, 88, 5].

His Ministers. The foremost was the Puro-hita, literally "placed in tront" [i, 1, 1]. It is office was called Purohiti and Purohtā [vii, 60, 12; 83, 4]. He was the sole associate of the king as his preceptor, or guide, philosopher, and friend. Examples of Purohitas in the Rigveda are Visvāmitra or Vasishtha, in the service of the Bharata king, Sudās, of the Triteu family [iii, 33, 53; vii, 18]; the Purohita of Kuruśravana [x, 33]; and Devāpi, the Purohita of sāntanu [x, 98]. His chief function was that of the domestic priest of the king. He was the alter ego of the king in all religious matters. But he also assumed leadership in matters political. He accompanied the king to battle and strengthened him by his prayers for his safety and victory [vii, 18, 13]. It was the predominance of the Brāhmana in politics which is significant in all ages of Indian history.

The king's entourage also included the Senānā, "leader of the army" [vii, 20, 5; ix, 96, 1], and the Grāmanā, the leader of the village [x, 62, 11; 107, 5] for both civil and military purposes. There must have been many Grāmanās in a kingdom, but the texts seem to contemplate only one as being in the royal entourage, possibly as a representative of the rural interests and population. The king's personal following was also called upasti (dependents) [x, 97, 23] and *ibhya* [i, 65, 4].

Assemblies. The king's autocracy was somewhat limited by the popular bodies called the $Sabh\bar{a}$ and the Samiti, through which the will of the people expressed itself on important HC-4 matters affecting their welfare, including the election of the king himself.

The Sabhā is mentioned in many passages of the Rigveda [vi, 26, 6; viii, 4, 9; x, 34, 6], which, however, do not define its exact character and functions. It is used in the sense of an assembly as well as of the hall or meeting-place for social intercourse and discussion of public matters like cows, and for dicing. A person "eminent in the Assembly" is called sabhāsaha [x, 71, 10]; "worthy of the Ascembly", a sabheyz [ii, 24, 13]; there is mention also of the Sabhā being attended by persons of noble birth, su-jāta [vii, 1, 4], and of "wealth worthy of the Sabhā (rayih sabhāvān in iv, 2, 5). These terms probably indicate that the Rigvedic Sabhā was a Council of Elders or Nobles.

The Samiti is also mentioned in many passages in the *Rigveda* without throwing light on its exact character. There is a reference to the king being a familiar figure in the *Sumiti* [x, 97, 6] and to his duty of attending it [ix, 92, 6]. One passage represents the king meeting the *Samiti* with power invincible and capturing their minds and their resolutions [x, 166, 4]. Another emphasizes the fact that concord between the king and the *Samiti* was essential for the prosperity of the realm [x, 191, 3: a prayer for union of *Martra* (Policy) Aims, Minds (*Manal*), Hearts (*Chittam*) and Endeavour (*ākūti*) between the king and Assembly (*Samiti*)].

Justice. Evidence is meagre on this subject. The system of Wergeld (monetary compensation to relatives of the man killed) was in force. A man is called a Satadāya [ii, 32, 4], as the price of his blood was a hundred cows. But the niggardly and unpopular Papi was called a Vairadeya [v, 61, 8], deserving "the requital of enmity". The fixing of such prices shows an improvement upon the primitive system of "eye for eye and tooth for tooth", and a restriction of the sphere of private rownce. Terms like Ug:a [vii, 33, 6] and Jivagribh [x, 97, 11], literally "seizing alive", are taken to indicate police officials. The arbitrator of disputes was called Madhyama-ŝi, "lying in the midst" [x, 97, 12]. The village judge is called Grāmyavādin in the later Taittiriya-Sanhitā [ii, 3, 1, 3].

War. The Rigvedic wars were those for defence and conquests, and also expedition into neighbouring territory for the sake of booty [x, 142, 4]. A battle was call d a yuddna [x, 54, 2] or a rana [i, 61, 1, 9]. The army, prit or pritanā [vii, 20, 3], comprised fcot-soldiers, patti [Av., v.i, 62, 1], and charioteers going together to battle [ii, 12, 8]. We also read of chariots opposing troops (grāma) of infantry [i, 100, 10] or of hand to hand fight. mushti-hatva [i, 8, 2] carried on by the fost-soldier against the charioteer [v, 58, 4]. The equipment of the warrior, Yodha [i, 143, 5], is described in the account of Dasa-rajna in vi, 75. He was armed with the following weapons: (1) bow, dhanus [viii, 72, 4] and arrow. bana [vi, 75, 17]. The bow was made of a strong staff bent into a curved shape (vakra) with its ends joined by the bowstring, iva, made of a strip of cowhide [vi, 75, 11]. The arrow was discharged from the ear and antly called karna-yoni [ii, 24, 8], i.e. "having the ear as its point of origin." The quiver was called ni shangin [v, 27, 2 : Sudhanvan ishumento nish nigingh ("warrior well-equipped with bow, arrow, and auiver")].

(2) Coat of mail, varma, made up of parts, metal p'atcs, sewn together $(sy\bar{u}ta)$ [i, 31, 15; x, 101, 8]; also called *atka*, described as bring woven (vyuta) and close-fitting (surabhi) [i, 122, 2; vi, 29, 3].

(3) Handguard, *hastaghna*, as protection against friction of bowstring [vi, 75, 14].

(4) Helmet, *siprā* [*ib.*] of iron (or copper) |*iv*, 37, 4: *ayaļsiprā*] or of gold [*ii*, 34, 3: *hiraŋya-siprā*]. The helmeted warrior was a *siprin* [*i*, 29, 2].

Other weapons referred to are asi, sword, with its sheath, asi-dhāra and the attached belt, vāla [i, 162, 20]; srakti, spear [vii, 18, 17]; srika, lance [i, 32, 12]; didyu, missile [i, 71, 5]; and adri [i, 51, 3] or asani [vi, 6, 5], sling stores. The weapons lent themselves to skilled use [i, 92, 1].

The chariot was drawn by two, three [x, 33, 5], or four horses [ii, 18, 1], which were control ed by the driver, sārathi i[i, 55, 7], by means of reins, raśmi, and whip, kaśā [v, 83, 3]. His companion-warrior was seated to his left and hence called savyashthā [ii, 19, 6; x, 102, 6]. Other accompaniments of war were banners, *dhvaja* [vii, 85, 2], drums, *dundubh*i [i, 28, 5], and war-cries, *kranda* [ii, 12, 8].

Military operations included the storming of defences, earthworks or dikes, thrown up against attack [vi, 47, 2] or siege of forts (Pur) by fire [vii, 5, 3].

Learning. The Rigvedic civilization was based on plain living and high thinking. It is lacking in great monuments of material progress like the Egyptian or Assyrian civilization but not in proofs of intellectual and spiritual progress. Life was simple, but Thought high and of farthest reach, wandering through eternity. Some of the Prayers of the *Rigveda*, like the Gāyatrī Mantram, touch the highest point of knowledge and sustain human soul to this day, while no Hindu, however modernized, will permit a single alteration of their original accents, syllables, or words.

The history of *Rigveda* is the history of the culture of The Rigveda in the form in which it is now extant the age. is a composite work made up of different parts and chronological strata, comprising not merely the hymns proper in praise of the gods, invocations, and sacrificial songs, but also ballads, fragments of secular poetry, and hymns conveying the highest philosophical speculation. The Rigveda itself refers to older and later poetry and to older and later Rishis, the authors of its hymns [i, 1, 2; 109, 2, etc.]. Its material had been building through the ages. Each Rishi was the "seer" of the hymns revealed to him as the result of his contemplation based on the practice of *tabas* or austerity [x, 109, 3; 154, 2]. He confined them to his son and pupil, his family. Each particular Rishi-Kula or family thus functioned as a Vedic school where its own stock of hymns was conserved and transmitted from sire to son, or preceptor to pupil. The work of all these families of Rishis or Vedic schools resulted in a large output. a general, national stock of hymns. Out of this general body or floating mass of hymns, a handy selection was necessary for purposes of worship. Thus arose the selection called the Rigveda-Samhitā, out of which arose on similar principles the other three Vedic Samhitas of Sama, Yajus, and Atharvan. We have thus here four stages in the growth of Vedic learning: (a) the growth of the earliest hymns; (b) multiplication of hymns at different centres or schools, the different priestly families; (c) selection of hymns in the Rigveda-Samhitā; and (d) growth of the other three Vedic Samhitās out of the original material preserved and presented in the Rigveda-Samhitā.

All this development recorded in the *Rigveda* points to a long history. "Some hundreds of years must have been needed for all the hymns found in the *Rigveda* to come into being" [Macdone'l]. "Centuries must have elapsed between the composition of the earliest hymns and the completion of the Samhitā of the *Rigveda*" [Winternitz]. And, accordingly, when we come to the *Rigveda*, we come to a high degree of linguistic and philosophical development. The Rigvedic Sanskrit shows no trace of a growing language. Its entire grammatical mechanism is perfected; every tense, mood, every number and person of the verb, is fixed, and all the terminations of the cases are firm'y established, pointing to the later and more advanced inflectional stage in the life-history of a language. As remarked by Bunsen, "even these earliest specimens of Vedic poetry belong to the modern history of the human race."

The principles on which the selection and arrangement of hymns were made in the *Rigveda-Samhitā* and the methods of their conservation show considerable literary skill and originality of design. First, six of the Rigvedic Rishis were chosen as the most representative ones whose work was worthy of concervation. These were Gritsamada, Viśvāmitra, Vāmadeva, Atri, Bharadvāja, and Vasishtha. The hymns attributed to them were arranged in six separate "family" books, the Manda'as II-VII of the *Rigveda*, which form its nucleus. To these were added (1) the group of hymns by other families to form the second part of Manda'a I ((51-191); (2) the hymns making up the first part of Mandala I; (3) the hymns attributed to "Iv of Richi Kanva making up Manda a VIII" (4 + t e

collection of Soma hymns in one place, Manda'a IX, instead of leaving them mixed up with the hymns making up the other Manda'as; and (5) a collection of supplementary hymns of the same number (191) as the number of hymns of Manda'a I, to form Mandala X, exhibiting some special features in its language, metrical form, and contents comprising philosophical hymns and those bearing on miscellaneous topics like marriage or burial.

The Samhitä thus compiled contained 70,000 lines out of which 5,000 are found to be repetitions. This was because there was already in the country a floating mass of hymns upon which the Rishis composing the later hymns had drawn as common literary property. It is also to be noted that a high standard of verbal authenticity was maintained in the long interval between the rise of the hymns and the constitution, by grammatical editors, of the extant phonetic text called the Samhita. These editors have scrupulouely preserved in the Samhitā text the actual words used by the ancient seers and the most minute irregularities of accent or alternate forms without any attempt at modernization, except where changes are called for in phonetic forms by the rules prevaiing in the later phase of the Sanskrit language when the sacred text was edited. Thus the word sumna was not replaced by dyumna, but the form of the word; tvam hi Agne would appear as tvam hy Agne, "for thou, O Agni."

When the Samhitā text was constituted, other devices were evolved for its own conservation in turn against possible changes or corruption in time. These may be considered in this connection, though they were considerably later in time. The first was the formation of a new text of the Samhitā itself in which every single word is shown in its independent and phonetically unmodified form and compounds are separated into their elements. This is called the Pada pāţha or "word-text" the other device was the Krama-pāţha, "step text", in which every word of the Pada-pāţha appears twice to be prorounced both after the preceding and before the following one. Thus a b c d as representing the first four words would be read as ab, bc, cd.

The scheme of protecting the purity of the sacred text was further elaborated by the composition of special treatises like the *Prātišākhyas*, presenting, with examples, the euphonic modifications necessary for turning the Pàda into the Sanihitā text, and the *Anukramaņīs*, or Indexes, stating the number of the hymns, verses, words, and even syllables of the sacred text by way of checking its integrity. "These devices have secured a faithfulness of tradition unparalle'cd in any other ancient literature" [India's Past by Macdonell].

Education. Now as to the methods of learning and education in that age. As has been a ready indicated, the home of the teacher was the school where he taught the particular sacred texts for which he was responsible to his pupils, mostly his cons or nephews. The texts were in the first instance learnt by rote. The Rigveda [vii, 103, 4] refers to the repetition by the pupil of the words taught by his teacher. A great importance was attached to enunciation and pronunciation. There is mention of seven forms of utterance and four grades of speech [i, 164, 3, 5; Taitti. Sam., vi, 4, 7, 3] and also of the skill of Viśvāmitra in resitation (Rv., iii, 53, 15). But the fundamental educational method was *tapas* or practice of penance and austerity as a process of self-realization [x, 109, 4; 154, 2: 190, 1: 167, 1] by which was produced the Muni of divine afflatus (dcveshita) [x,136. 2, 4, 5], or Vipra, the "inspired singer" [i, 129, 2, 11; 162, 7; iv, 26, 1] (from root vib, "quiver"), of the Manishi [vii, 103], comprehending all knowledge of which only a part is said to be revealed in human speech $(v\bar{a}k)$. We have thus here stated the profound philosophical position attained in the Rigveda that what is rendered explicit in the creation is but a fragment of the Implicit or the Absolute. Another interesting passage [vii, 103] refers to a period of intense subjectivity and concentration followed by Enlightenment (parianya from pri, to become perfect) by which the pupil becomes qualified to be an expounding teacher (vāchamavādishuh), just as frogs, after a season of slumber. are quickened into activity by the clouds (parianva).

Religion and Philosophy. The Rigvedic simplicity of life contrasts itself with the e aboration of its religious side as shown in the magnitude of the pantheon.

First, we have a group of deities standing for the principal phenomena of nature, viz. (a) Dyaus (sky); (b) Prithivi(earth) [cf. $dy\bar{a}v\bar{a}$ - $brithiv\bar{i}$ "heaven and earth" in i, 143, 2; 159, 1; etc.]; (c) Varuna (the sky-god proper), the subject of some of the noblest hymns of the Rigveda Varuna is also given the epithet Asura, corresponding to the Irānian god Ahura Mazda. In the more philosophical hymns of the Rigveda, Varuna typifies Rita, indicative of the cosmic, and, later, the moral, order; (d) Indra, the god of thunderstorm, who causes rain. Indra gradually acquired supremacy over Varuna in Rigvedic worship as the Aryans left the dry regions of the Puniab and advanced eastward to the holv land of Brahmavarta noted for rain and storm; (e) the Sun worshipped in no less than five forms as (1) Surya: (2) Savitri, representing the auickening power of the sun: (3) Milra, more famous in Iran than in India where he is associated with Varuna; (4) Pushan, symbolizing the power of the sun in its effects on the growth of herbs and vegetation; (5) Vishnu, representing the swift-moving sun in the Rigveda, though later he is worshipped as an independent god; (f) Rudra, or storm-god, the precursor of later Siva; (g) the two Asvins, representing the morning and evening star; (h) the Maruts, storm-gods attending on Rudra; (i) $V\bar{a}vu$ and (i) $V\bar{a}ta$, the wind-gods; (k) Parjanya, the god of rain, the waters and the rivers; (1) Ushas, the god of dawn, inspiring some of the most beautifu! Rigvedic poetry.

Next, we have a group of domestic deities, viz. (a) Agni, the god of fire in his three forms, the sun in the heavens, the lightning, and the terrestrial fire; (b) Soma (draught of immortality), who has inspired the most mystical hymns of the *Rigveda* and is identified with the moon.

We have also a group of abstract deities, viz. (a) $\delta raddh\bar{a}$, faith, and (b) Manyu, wrath.

There were also some minor deities like (a) the *Ribhus*, aerial elves; (b) the *Apsaras*, water-nymphs; and (c) the *Gandharvas*, aerial sprites.

Sometimes, the gods are conceived of as animals, e.g. Indra as bull, the Sun as a swift horse. But this does not indicate any animal worship in the *Rigveda*. Nor is there in the *Rigveda* any trace of what is known as *Totemism*, i.e. be'ief in an animal ancestor with the consequent treatment of that animal as sacred and divine, or of snake-worship, although the snake figures as the god of abyss, or as the demon producing drought whom Indra destroys, though there may be a trace of *Fetishism* as seen, for instance, in the use of the image of Indra as protection against one's enemies. The Rigvedic gods had also their enemies who are designated as 'Asuras and Rākshásas. The Rigvedic religion consisted principally in worship being offered to the gods whose favours or boons are expected by the performance of prescribed sacrifices by which these could be secured or controlled. The sacrifice consisted of offering of milk, grain, ghee, flesh, and Soma. But it is the Soma-sacrifice alone which is elaborated in the *Rigveda*. The ceremonial religion was so far developed as to have given rise to seven different classes of priests necessary for its performance, viz. the *Hot*₁*i* priests reciting hymns, the *Adhvaryu* performing manual functions connected with worship, the *Udgāt*₁*i* singing the Sāman chants, together with their assistants. Some sacrifices were elaborate and costly and could be performed only by the king or the nobles (the *Maghavans*). The *Rigveda* is thus distinctly aristocratic in its outlook and has very little of popular religion suitable for the masses.

All this ritualistic religion, however, culminated in a profound philosophy which finds expression chiefly in the tenth *Mandala* of the *Rigveda*, and also in other passages. The multiplicity of the gods is frankly and boldly questioned and the ultimate unity of the universe is asserted as the creation of one God to whom different designations are applied, such as *Visvakarmā*, *Hiranyagarbha*, *Prajāpali*, or *Aditi*, the primæval mother. The creation is also presented as the outcome of the sacrifice made by the *Virātpurusha* (Oversoul) or of evolution from non-being manifested in the form of water or heat. The Rigvedic passage [i, 164] pointed'y refers to "the One Reality (*ekam sat*) whom the sages speak of in many ways, calling it Agni, Yama or *Mātariśvan*".

Lastly, the *Rigveda* believes in the life after death in the world controlled by Yama.¹

1

CHAPTER V

7

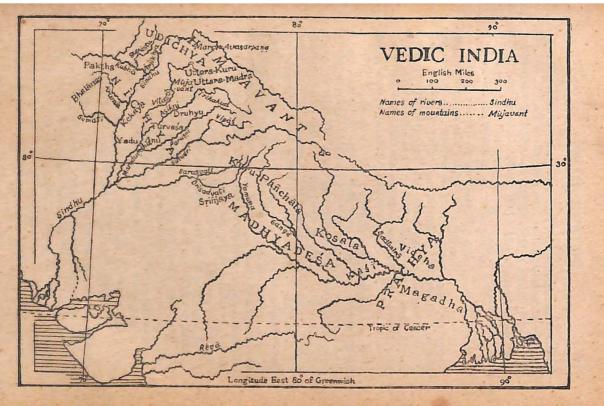
LATER VEDIC CIVILIZATION

Sources. The Rigvedic civilization is to be distinguished from the civilization revealed in the later Vedic works, such as the Vedic Samhitās, the Brāhmaņas, the Āranyakas, and the Upanishads.

We may note at the outset how the different branches of Vedic literature had grown out of one another. The Samhitā of the Rigveda was the primary work. The Sama-Veda Samhitā was made out of it. But the two Samhitas of the Yajur-Veda, Back and White, contain new matter, the formulaæ and prayers for the Adhyaryu priest in charge of the actual performance of the sacrificial acts. The Black Yajur-Veda is so called because it combines into one whole its contents of both verse and prose, whether the formu'æ and pravers or their prose explanations or comments. The White Yajur-Veda, however, confines the verse and prose formulæ to the Samhita called the Vājasaneyi Samhitā and relegates the prose explanations to a Brahmana called the Satapatha Brahmana. Lastly, there was the Atharva-Veda Samhitā meant for the priest called Brahman who superintended the whole sacrifice. It contains 731 hymns and about 6,000 verses, some of which are even older than the Rigveda, and some give interesting secular details. These are (1) Songs and Spells for healing of direases [e.g. v. 22, describing fever]; (2) Benedictions for farmer, shepherd and merchant; (3) Spells for harmony (with master, or at Assembly or Court of Law): (4) Songs of marriage and love: (5) Songs in aid of Royalty, and the like.

The Samhitās were followed by the $Bt\bar{a}hmanas$, the $\bar{A}ranyakas$ and the Upanisha1s.

The Brāhmanas, the earliest Indo-European prose literature, are theological treatises, explaining in minute detail the Vedic sacrificial ceremonial and illustrating its value by numerous stories and speculations on its origin. They are attached to the Vedas, e.g. the Aitareya Brāhmana of the Rigueda deal-



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ing with Soma sacrifices and royal inauguration ceremonics; the *Pañchavimśa* of the *Sāmaveda* which contains the famous Vrātyastoma by which non-Aryans could be admitted to Aryan society; the *Satapatha* of the White *Yajurveda*, the most valuable work of the Vedic age in the variety of its contents; and the *Gopatha Brāhmana* of the *Atharva-Veda*.

The $\bar{A}\tau anyakas$ are the concluding portions of the $Br\bar{a}hmanas$ and are so called because the philosophical and mystical character of their contents required that they should be studied in the solitude of the aranya or forest. The extant $\bar{A}\tau anyakas$ works are the Aita:wya, the Kaushitaki, and the Tauttiriya, which are appendages to the $Br\bar{a}hmana$ works of those names, and of which the first two are associated with the Rigveda and the third with the Black Yajurveda.

The $\bar{A}_{Tanyaka}$ form a transition culminating in the Upamishads which are usual'y their final form and, indeed, mark the last stage in the development of Brahmana literature and. from their language, closely approximating to classical Sanskrif. emerging about 500 B.C., represent the latest phase of Vedic literature. The contents of the Rigveda broadly reveal its twofold character, philo-ophical (iniana-kanda), and ritualistic (karma-kanda), of which the latter is developed and elaborated in the Brahmanas proper, and the former in the Upanishads. The Upanishads thus do not believe in the sacrificial ceremonial but in the saving knowledge by which deliverance is obtained from mundane existence through the ab orption of the individual soul in the wor'd-soul (atma). The two oldest and most important of the Upanishads are the Chhandogya of the Samaveda and the Brihadaranyaka of the White Yajurveda. Among other Upanishads of note may be mentioned the Kāthaka, Īša, Švetāšvatara, Maitrīyaņīya, Taittirīya, Mundaka, Praśna, Mandukya, and Kena, but except the Kathaka, these are not be ieved to be much o'der than Bu"dhism.

Later Vedic history and civilization are to be studied in all this vast and varied literature indicated above.

Ex ension of Territory. In the period of the *Rigveda*, the centre of civilization was shifting from the west, the land of the famous five peeples ($pa\bar{n}chajan\bar{a}h$) in the Panjab, to the east, the land between the Sarasvatī and the Drishadvatī.

the home of the Bharatas. But now the localization of civilization in the more eastern regions has been definitely achieved. Its centre is Kurukshetra, bounded on the south by Khandava, on the north by Türghna and on the west by Parinah. In relation to this centre, the later Madhyadesa, the land of the Kurus and Pañchālas, with the Vasas and Usinaras, are located the Satvants to the south, and the Uttara-Kurus and the Uttara-Madras to the north beyond the Hima avas, by a famous geographical and ethnological passage found in the Aitareya Brahmana. While the west recedes into background, the regions east of the Kuru-Päñchāla country come into prominence, like Kośala (Oudh), Videha (north Bihar), Magadha (south Bihar), and Anga (east Bihar), while to the south about the Vindhyas, which are not mentioned in any Vedic text, are located imperfectly Brahmanized outcast tribes like the Andhras and Pulindas (mentioned in Asokan inscriptions), Mūtibas, Pundras and Sabaras (who stil live on the Madras border of Orissa and speak a Munda dialect) and the Naishadhas, as well as the region called Vidarbha mentioned in the Aila wya [vii, 34, 9] and Jaminiva Upanishad Brahmanas [ii, 440]. Evidently the Aryan civilization had not vet overstepped the Vindhva.

New States and Peoples : The Kuru-Pañchālas. An extended territory brought with it new States and Peoples, new centres of life. We hear no longer of the Anus and Druhyus. the Turvasas, the Krivis and Kurus, the Purus and the Bharatas of the Rigveda, but of new tribal formations and amalgamations led by the Kuru-Panchalas who in the texts figure as the best representatives of Vedic culture, models of good form, speakers of the best Sanskrit [Salapatha Br., iii, 2, 3, 15], performers of sacrifices with perfection, having the best of kings, running the best Academy, and leading in other ways. The Kaushitaki Brahmana refers to people going to the north in search of pure speech [vii, 6]. The Pañchāla king, Pravāhana Jaiva'i, is mentioned as daily attending the Penchaia-Parishad [Chh. Up., v, 3; Briha. Up., vi, 2, 1-7]. The hostility between the Kurus and Pañchālas as depicted in the Mahabhārata is not known in the Vedic texts which tell of the confederate kingdom of the Kuru-Pañchā'as as being a seat of culture and prosperity, though the independent history of the

Kurus seems to have been chequered. They had their zenith of prosperity under Parikshit and Janamejaya, whose capital was Asandīvant [*Sata. Br.*, xiii, 5, 4, 2] with two other towns, Mashņāra [*Aita. Br.*, viii, 23, 3] and Kārotī [*Sat. Br.*, ix, 5, 2, 15]. The *Atharvaveda* [xx, 127, 7-10] describes this prosperity by stating that in the rāshţra of Parikshit the husband asks the wife what he should bring her, "curus, stirred drink, or liquor," so "thriving" were the whole people there. But the *Chhāndogya Upanishad* alludes to a hailstorm or perhaps a shower of locusts afflicting the Kurus, and the *Brihadāranyaka* to some catastrophe in which they perished. But the confederate Kuru-Pañchāla kingdom continued in prosperity for a long time with an extensive territory indicated by its chief towns like Kāmpīlya, the capital, Kaušāmbī, and Parichakrā [*Sat. Br.*, xiii, 5, 4, 7].

Kośala, Kāśi, and Videha. The Aryan expansion towards the east is indicated in a legend of Satabatha Brahmana [i, 4, 1, 10, 17] describing how, Mathava the Videgha¹ (i.e. King of Videha) migrated from the Sarasvati, the land of Vedic Culture, crossed the Sadānīrā, the eastern boundary of Kośala (modern Gandak), and came to the land of Videha. The texts in fact testify to the growth of three kingdoms as seats of Vedic culture, viz. Kośala, Kāśī, and Videha, which sometimes confederated between them elves. Para, son of Atnāra, figures as a king of both Kosala and Videha (Sänkhäyana Stauta Sūtra, xvi, 9, 11], while Jala Jātūkamva as a Purohita of the Kosalas, Kāsīs, and Videhas [ib. lvi, 29, 6]. The most famous kings of the times were the two philosopher-kings Ajātašatru of Kāšī, and Janaka of Videha, who were leaders of thought, in association with the Brahman scholars, Yajñavalkva, and Svetaketu.

Magadha and Anga. Beyond the pale of Aryan civilization lay Magadha which along with Anga is indicated

^{1.} It is, however, to be noted that the priest and guide in this adventure was Gotama Rāhugana, a Rigvedic Rishi, and this rather establishes the fact that this eastward extension of Aryan civilization was achieved in the time of the *Rigveda*. Therefore, we find Videha already leading in Vedic culture under King Janaka and Rishi Yājñavalkya, though it was its easternmost outpost and farthest from its headquarters.

as a distant land in the Atharvaveda [v, 22, 14] which is also familiar with the Bengal tiger and makes the king at his consecration step upon a tiger skin. The expression Anga-Magadhāh occurs in the Gopatha Brāhmana [ii, 9]. A Māgadha is dedicated in the Yajurveda |Vaj. Samhita, xxx, 5, 22| to loud noise (ati-ktushta), suggestive of minstrelsy, A Magadha in later literature denotes a minstrei. The dislike to Magadha is as old as the Rigveda if the Kikatas it mentions were Magadhans, as some believe. The dislike is more explicit in the Atharvaveda where evil things like fever are wished away to the distant westerners like the Gancharis, Bahlikas, and Mujavants [v, 22, 7] and to easterners. Angas and Magadhas. It was due to the imperfect Brahmanization of the e regions, the home of the aborigines, and, later, of Buddhism which did not believe in the caste-system. The native Magadhans are also dubbed as Vrātyas in the Vedic texts [Atharvaveda, xv, 2, 1-4], regarded as outcasts and nomacs, speaking a Prakritic dialect as indicated by the remark that "they called what was easy of utterance (i.e. Sanskiit) hard to speak" [Panchavinisa Br., xvii, 1, 9]. The Prakrits find it hard to accommodate the harsh consonantal combinations which Sanskrit affects. But the Vrātyas were not strangers to Sanskrit when they are described as dikshita-vach, speaking the language of the initiated [*ibid*.]. It was open to them to acquire admission to Brahminical society by performance of prescribed rites [Apastamba Snaula Sutra, xxii, 5, 4-14]. It is best to regard them not as non-Aryans but as Aryans outside the pale of orthodox Brahmin culture. The Aitcreya Aranyaka [ii, 1, 1] refers to the Vangas, Vagadhas, and Cheras as birds, i.e. non-Aryans, speaking language not intelligible to the Aryans. The Vagadhas might be a milreading for the Magadhans, while the Cheras were a wild tribe in the Vindhya region. The Kaushitaki Upanishad [iv, 1] sums up the situation by describing Aryan India as represented by the Usinaras, Vasas, Matsyas, Kurus, Panchālas, Kāśis, and Vicehas.

Social System. While the *Rigveda* knew of a hereditary priesthood and nobility, and even refers to the threefold [viii, 35, 16-18] or fouriold division [i, 113, 6; x, 90, 12 (the Purusha-sūkta)] of the people, this period saw the development of the full-fiedged caste-system due to differentiation of occupa-

tions growing in number and variety with progress of settled life and due also to contact with aborigines raising questions of purity of blood and the colour bar.

The system, however, is not yet seen to be as rigid as in the succeeding period of the $S\bar{u}tras$. It was a midway between the laxity of the *Rigveda* and the rigid ty of the $S\bar{u}tras$. In the *Rigveda*, the restrictions on inter-marriage applied only to incest, such as marriage between brother and sister, father and daughter. In the *Satapatha Biāhmana* [i, 8, 3, 6], the restriction is extended to marriage with relations of the third or the fourth degree, while Brāhmana and Kshatriya could intermarry with the lower castes, including Sūdra. Sukanyā, daughter of Kchatriya King Saryāta, is mentioned as marrying Brāhmana [*ib.*, iv, 1, 5, 7].

Change of caste was very unusual but perhaps not impossible in that age. The *Rigveda* describes Viśvāmitra as a Rishi, but the *Aitareya Brāhmana* as a Kshatriya. Certain Rigvedic hymns are even ascribed to royal R shis. In the *Upanishads* we have certain remarkable examples of kings leading in learning, and teaching Brāhman pupils, such as King Janaka of Videha, King Aśvapati of the Kekayas, King Ajātaéatru of Kāśī, and King Pravāhana Jaivali of Pañchāla. But these cases do not prove interchange of castes but of occupations. They only show that some of the kings of the times were individually devotees and patrons of learning. Again, there is not a single instance in the entire Vedic Literature of a Vaiśya being promoted to the rank of a priest or a prince, Brāhmana or Kshatriya. On'y the two upper castes cultivated clozer relations.

The lines on which the caste system was developing in this period are well indicated in a passage of that representative work, the Aitareya Brāhmaņa [vii, 29]. The Brāhmaņa is described as a receiver of gifts $(\bar{a}-d\bar{a}y\bar{i})$, a drinker of Soma, being always on the move $(avas\bar{a}y\bar{i})$, and moving at will (yathākāma-prayāpya), showing that he attached himself to kings at will. The Vaiśya is tributary to another (anyasyaba'ikrit), to be lived on by another (anyasyādyah) and to be oppressed at will (yathākāmajyeyah), i.e. removable at the king's will from his land. The Sūdra is the servant of another (anyasya preshyah), to be expelled at will $(k\bar{a}moth\bar{a}pyah)$ and to be slain at will $(yath\bar{a}k\bar{a}mavadhyah)$, showing that he had no rights of property or life against the Kshatriya or king. This passage points to the spiritual authority of the Brähmana who was subject in secular matters to the authority of the king as the temporal sovereign. It also shows that the Vaiśya, or the commoner, was not given the right of property or landholding except on the basis of tribute of tax payable by him in return for his protection by the Kshatriya. The Kshatriyas, or nobles, were the landholders and the Vaiśyas, the tenantry. Grants of lands and slaves came to the Kshatriyas as gifts for their conquests of the aborigines irom the king.

Economic Life. The growth of economic life is indicated in the many prayers (paushikani) contained in the Atharvaveda for the success of the farmer, the shepherd, or the merchant. There are prayers for ploughing, sowing, growth of corn, for rain, for increase of cattle, exorcisms against pests, wild animals, and robbers, and the like. There was continued progress in agriculture and pastoral pursuits. The plough $(s\bar{i}\tau a)$ became large and heavy enough to require a team of twenty-four oxen [Kāthaka Samhitā, xv, 2] to drag it. The furrow was called sitā [ib., xx, 3]. The Satapatha Brāhmana classifies agricultural operations as "ploughing, sowing, reaping, and threshing" [i, 6. 1. 3]. It also refers to the use of cowdung (karisha) as manure [ii, 1, 1, 7], while the Atharvaveda [iii, 14, 3, 4; xix. 31. 31 refers to the value of the natural manure of animals. Many kinds of grain were grown, such as rice (vrihi), barley (yava), beans (mudga, māsha), sesamum (tila), and grains called godhuma, masura, etc., of which a list is given in the Vājasaneyi Samhitā [xviii, 12]. Their seasons are also mentioned : barley, sown in winter, ripened in summer; rice, sown in the rains, ripened in autumn, but beans and sesamum ripened later, in winter [Taittiriya Samhitā, vii, 2, 10, 2]. There were a'so two harvests a year [ib., v, 1, 7, 3].

There was a striking development in industry and occupations, of which a list is given in the Yajurveda [Vājasaneyi Samhitā, xxx, 7]. We hear of such new occupations as those of fishermen, fire-rangers, ploughers, washermen, barbers, butchers, footmen, messengers, makers of jewels, baskets, ropes, dyes, chariots, bows, smelters, smiths, potters, and so forth. Architectural skill is indicated in the construction of the Fire-altar with 10,800 bricks and shaped like a large bird with outspread wings [Vājasanevi Samhitā, xi-xviii (on Agnichavana)]. There is mention of professional acrobats (Vanisa-nartin) and players on drum and flute; of the boatman. Nāvaja [Sata. Br., ii, 3, 3, 5], ferryman or poleman, Sambi [Atharvaveda, ix, 2, 6], rudders (naumanda in Sata, Br., ii, 3, 3, 15), and oars, aritra, handled by the arita, and even of a ship of a hundred oars (satāritra) [Vājasaneyi Samhitā, xxxi, 7] used for sea-voyages. The Atharvaveda [v. 19, 8] compares the ruin of a kingdom to a ship sinking by leaking (bhinna). There is mention of merchant and his trade, vanijyā [Sala. Br., i, 6, 4, 21], and of the moneylender, kusīdi [ib., xiii, 4, 3, 11]. The word Sreshthi occurs in several texts [Aita. Br., iii, 30, 3; iv, 25, 8-9; vii, 18, 8: Br. Up., i. 4, 12, etc. 1 in the sense of a merchant-prince and possibly the "headman of a guild", while the word straishthya is also interpreted in a technical sense implying the presidency of a guild.

Woman figured in industry as the $|dyer(rajayitr\bar{i})\rangle$, the embroiderer (*peśaskārī*), the worker in thorns (*kantakīkārī*), or the basket-maker (*bidala-kārī*).

The advance of civilization is noticed in the extended use of metals. A passage in the $V\bar{a}jasaneyi$ Samhit \bar{a} [xviii, 13] mentions these as hiranya (gold), ayas (bronze), syama, i.e. swarthy (iron), loha (copper), sisa (lead), and trapu (tin). Ayas, somewhat undefined in the Rigveda, is now differentiated as syama ayas to indicate iron [Av., xi, 3, 1, 7; ix, 5, 4,] and lohita ayas [ib. xi, 3, 1, 7]or lohayasa [sata. Br., v, 4, 1, 2], red ayas or copper.

Copper was used to make bowls [Av., viii, 10, 22].

Sīsa, lead, is mentioned as being used as a weight by weavers $[V\bar{a}ja, Sanihit\bar{a}, xix, 80]$.

Rajata, silver, was used to make ornaments (*rukma*) [Sata. Br., xii, 8, 3, 11], dishes, pātra [Taittirīya Br., ii, 2, 9, 7; iiii, 9, 6, 5], and coins, nishka [Pañcha. Br., xvii, 1, 14].

Gold, *hiranya*, was widely used and obtained from the bed of rivers like the Indus [Rv., x, 75, 8], or extracted from the earth [Av., xii, 1, 6, 26, 44], or from ore by smelting [Sata. Br., vi, 1, 3, 5], or from washings [ib., 11, 1, 1, 5]. It was used to HC--5 make ornaments for neck and breast, nishka, ear-rings, karnasobhana, and cups [sata. Br., v, 1, 2, 19; 5, 28]. There were also known definite weights of gold indicating a gold currency, e.g. (a) Ashtā-prūd [Kāthaka Samhitā, xi, 1] and (b) satamāna = "weight of 100 Krishnalas" [sata. Br., v, 5, 5, 16.].

Another sign of the new era is the domestication of the elephant, *hasti* or *vāraņa*, noted for its strength and virility [Av., ii, 22, 1, 3; iii, 22, 6; vi, 70, 2]. The keeper of the elephant was called *Hastipa* [Vaja. Samhitā, xxx, 11].

Polity: Kingship. Kingship was conso idating itself as the normal form of government with the States growing in both number and size.

The theory of the origin of kingship is quaintly stated in the following passage of the Aitareya Brāhmana [i, 14]: "The Devas and Asuras were fighting..... The Asuras defeated the Devas ... The Devas said: 'It is on account of our having no king $(a \cdot rajataya)$ that the Asuras conquer. Let us elect a king.' All consented (rajānam karavāmahā iti ta:heti)."

Imperialism. There was also emerging the king of kings, the conception of paramount power and imperial sovereignty expressed in such technical terms as *adhirāj. vājē dhirāja, samrāţ* and *ekarāţ* used in most of the texts. The Aitareya Brāhmana [viii, 15] defines Ekarāţ as the sole ruler of the territory up to the seas, while the Atharvaveda [iii, 1, 4, 1] defines Ekarāţ to be the sole paramount soversien such as that of the people of the eastern regions (*prān višām patiķ*).

There were also developed special ceremonies for the anointment of emperors, such as the $V\bar{a}japeya$, the $R\bar{a}jas\bar{u}ya$, and the $A\bar{s}vamedha$, as described in the texts. The last ceremony, according to $\bar{A}pastamba\,Srauta\,S\bar{u}!ra$ [xx, 1, 1], was to be performed only by a sārvabhauma sovereign, i.e. by one ruling the whole country. According to the Gopatha Brāhmaua, one became a $R\bar{a}j\bar{a}$ by performing the $R\bar{a}jas\bar{u}ya$, while the $V\bar{a}japeya$ was for the Samrāt, Aśvamedha for Svarāt, Purusha-medha for Virāt, and Sarva-medha for Sarvarāt.

Nay, more : the texts even preserve the names of kings who by their conquests had achieved the eligibility for these imperial inaugurations. Both the *Aitareya Brāhmana* [viii, 2, 3] and the *Satapatha Brāhmana* [xiii, 5, 4], for instance, extol

the world-wide conquests of the two Bharata kings, Dauhshanti, who defeated the Satvants and won victories at Mashuara in the Kuru country, at Sächiguna, and on the Jumna and Ganges at a place called Vritraghna, and king Satrajita Satanika who had defeated the king of the Kāśīs. "The great deed of Bharata neither men before or after have attained, as the sky a man with his hands." No less than twelve such great kings are named in the two texts aforesaid. The ideal set before them in the sacred text [Aita. Br., viii, 20] is to "win all victories, find all worlds, attain superiority (*sreshthata*), preeminence (*pratishthā*) and supremacy (*paramatā*) over a l kings, and achieve over'ordship (sāmrājya), paramount rule (bhauiva), self-ru'e (svārājva), sovereignty (va rājva), supreme authority (pārameshthya), kingship (rājya), great kingship (māhārāiva) and suzereignty (ādhipatya), encompassing all, ruler of all territory (sarvabhauma), the sole single sovereign (ekarāt) of the earth up to its limits in the ocean."

Democratic Elements. Though menaichy thus established itself on firm foundations, it was not absolute but limited in several ways. Within the framework of autocracy, there were operative certain democratic elements the significance of which should not be missed. These were : (1) the people's voice in choosing their king; (2) the conditions imposed on the king's autocracy at this coronation; (3) the king's dependence on his Ministry; and (4) the Assemblies of the people, the Sabhā and the Samiti, as checks upon the king's absolutism.

Election of the King. The Atharvaveda has several passages indicative of the people choosing their king. The passage vi, 87, 88, appears to be a complete song of election of the king. The king's anxiety to secure the people's support and loyalty is expressed in Av., vi, 73, and viii, 94. It was necessary against his rivals, brothers and kinsmen [vii, 34; i, 29 and 30]. Av., iii, 3, contains spells in the interests of royalty. Av., iii, 3, 5, refers to a king in exile (anyakshetre aparudhani charantam) being recal'ed and being we'cemed alike by his friends and fees (*pratijanāh* and *pratimitrāh*). Av., iii, 8, 2, refers to the re-election of a king expel'ed from his kingdom and seeking support for its restoration. Other texts also contain references to kings being expelled from their realm and

their efforts to recover their lost sovereignty [*Taittirīya Sain-hitā*, ii, 3, 1; *Sata. Br.*, xii, 9, 3, 3, etc.]. The *Paīchaviniša Brāhmana* [xix, 7, 1-4] refers to a special ceremony called the $R\bar{a}d$ - $Yaj\bar{n}a$ by which a deposed king should get back his king-dom or a reigning king the lost loyalty of his subjects. The $V\bar{a}jasareyi$ -Samhitā [xix-xxi] recommends a ceremony for a banished king seeking to regain his throne.

This new position of the king resting on the suffrage of his people is indicated by appropriate titles. He is called the prince of princes (kshatrānānin rājendrah), the lord of the people (višānin vispatih), the sole lord of the exchequer (dhanapatin dhanānām), the sole lord and leader of the people (ekavīisham janānām), of the entire country and its living beings (vīishā visvasya bhūtasya), the highest of the people (kakud manushyānām), and co-equal with the gods (devānām arghabhāk) [Av., vi, 86].

Conditions of Coronation. These may be gathered from the rituals prescribed for the Rājasūva and best described in the Salabatha Brahmana. One of these requires the king-elect to seek the Anumati or approval of the earth, i.e. the mother country, in the following words : "Mother Prithivi ! Injure me not nor I thee !" "This is performed," says the interpreter, "lest she should shake him off (meyam nāvadhūnvīta)." The commentator explains that the metaphor shows that king and country must enter into friend'y relations like son and mother [v, 4, 3, 20]. Then there are offerings to the Divine Quickeners, to Savitā Satyaprasava for righteous energy, Agni Grihapati for mastery of the household, Soma Vanaspati for protection of forests and agriculture, Brihaspati Vak for power of speech, Indra Jyeshtha for pre-eminence in administration, Rudra Pasupati for protection of cattle. Mitra Satya for truth, ending with the offering to Varuna Dharmapati, which brings out the true character of the king as the upholder of Dharma. The Hindu theory regards Dharma, or Law, as the real sovereign, and the king as Danda or the executive to support and enforce Dharma. The above offerings symbolize the manifold qualifications and obligations of sovereignty. In Vedic tradition there is no theory of the divine right of kings, but only attribution of divine virtues to kings by means of prayers. Next comes the sprinkling of waters collected from seventeen different sources, river, of which the representative chosen is the Sarasvati of sacred memory, sea, whirlpool, flood, well, and even a stagnant pool. The Sarasvati symbolized Speech, the flowing river Vigour, flood stood for Plenty, sea for Dominion and the pond for the Lovalty of the people to the king, which should be steady and harmless like the waters of a stagnant pool (sthāvarāmanapakramanīm karoti, v. 3, 4, 14). The sprinkling is done jointly by the Brähmana (adhvaryu), a Kshatriva, and also a Vaisya, representing the three estates of the realm. The next important feature of the ceremonies was the bath administered to the king before he is seated on the throne. He must be first *dhritavrata*, established in the *vrata* or yow [Ait. Br., viii, 18]. He must be loyal to religion. law and truth (satva-sava, satvadharma in Taitti. Br. i. 7. 10. 1-6). and then take the following oath : "If I play thee false, may I lose the merit of all my religious performances and gifts, of my good deeds, my place, my life, and even my progeny" [Ait. Br., viii, 15].

The ascent to the throne $(\bar{a}sand\bar{a})$ is accompanied by exhortation to the four estates of the realm (the Brahmana. Kshatriya, Vaiśya, and Śūdra) for protecting the king-elect as "the precious treasure". Then the king is proclaimed with the words: "This man, O ye, People! is your king, but of us. Brahmanas. Soma is the king" [Sat. Br., v, 3, 3, 12; v, 4, 2, 3.1. This emphasizes the theory already explained that Dharma as represented by the Brahmana has precedence over the king who rules in secular matters. The Satapatha Brahmana [v, 4, 4, 5] further explains that the king and Brahmana stand together as upholders of the dharma among men, being both incapable of any speech or deed that is not right. In another passage [ii, 2, 2, 6], it is stated that "the Brahmanas who have studied and teach the sacred lore are the human gods". Then there is the further proclamation : "To thee this State is given. for agriculture (krishyai), for the common weal (kshemāya). for prosperity and for progress (poshāya)." It implies that (a) the kingdom is entrusted to the king as a trust; (b) the condition of his holding it is the promotion of the people's well-being and progress. The coronation is followed by another very significant rite. It is that of the Adhvaryu and his assistants striking the king on the back by the rod (dandair ghnanti). Thereby the king is rendered *adandya* and p'aced beyond the reach of judicial destruction (*enam dandavadhamatinayanti*) [*Sat. Br.*, v, 4, 4, 7]. This allo symbolizes the doctrine that the king, who can do no wrong and is above punishment. *adandya*, is himself the rod of justice, the *danda* which upholds the *dharma*. He is not the source of law but its sanction.

Ministers. The king's dependence on his Ministers is brought out in the part assigned to them in his consecration. For purposes of this function, they are called *Ratnins*, i.e. receivers of the jewels which are offered by the king-elect to each of them at his house at the ceremony called *ratna-havis*. The significance of the ceremony is indicated in the prescribed formula to be uttered by the king : "For it is for him that he is thereby consecrated, and him he makes his faithful follower" [Sata. Br., v, 3, 1, 6]. It was to win for the king the consent of the Ministers to his consecration and their loyalty. Each of these *Ratnins* is also described as a jewel in the crown of sovereignty (asyakam ratnam, ib.).

The constitutional character of this ceremony of ratnahavis is also indicated in the terms $R\bar{a}ja$ -kart η and $R\bar{a}ja$ -k η it applied in the Atharvaveda [iii, 5, 7] and the Brāhmanas [Aita., viii, 17, 5; Sata., iii, 4, 1, 7; xiii, 2, 2, 18] to those who, "not themselves kings," aided in the consecration of the king. In the Aitareya Brāmana, the "king-makers" are made to proclaim the king formally to the peop e.

The Atharvaveda mentions these king-makers to be as (1) the Sūta, bard; (2) the Ratha-kūra, the chariot-maker; (3) the Karmūra, artisan; (4) the Grāmanī the village headman; and (5) Rājās. The last comprised the nobles, the king's kinsmen, whose support of his election is mentioned as necessary in several passages. For instance, Av., i, 9, 3, 4, are prayers for the king's supremacy over his kinsmen (sajūtā), and iii, 4, refers to these kinsmen welcoming him as king, while i, 19 and 20 refer to them as a menace to his authority. In fact, these kinsmen and nobles, called rājās, encircled the king, who had always to reckon with them and make them friends.

These "king-makers" grow in number in the later texts. The *Taittirīya* texts mention twelve Ratnins, viz. (1) Brāhmaņa (i.e. the Purohita); (2) Rājanya (noble); (3) Mahishī (chief queen); (4) Vāvātā (favourite wife); (5) Parivriktī (discarded wife); (6) Sūta (charioteer); (7) Senānī, commander of the army; (8) Grāmaņī, village headman; (9) Kshattri, chamberlain; (10) Samgrahītri, treasurer; (11) Bhāgadugha, co.lector of taxes, and (12) Akshāvāpa, superimendent of dicing. The Śatapatha Brāhmaņa [v, v, 1, 1] includes the huntsman (gonikartana) and the courier (pālāgala), while the Maitrāyaņī Samhitā [ii, 6, 5] adds the Takshan (carpenter), Rathakāra (chariot-maker) called the Rājanya Rājā and the Gramaņī as Vaišya-giāmaņā. The Paāchaviniša Brāhmaņa [xix, 1, 4], however, gives an older and shorter list of what are called vīras, or herces, as forming the king's entourage, comprising brother, son, Purohita, Mahishī, Sūta, Grāmaņī, Kshattri, and Samgrahītri.

There was an order of precedence among these Ratnins. It was shown in the order in which the king visited them for *Ratna-havis*, his offering of jewe's. The first to be so visited was the Senānī followed by the Purohita, or Brāhmaņa, and others, except Kshattra or Rājanya, Go-nikartana, and Akshāvāpa, whom the king offered the jewels at his own place. An order of precedence is also indicated in a Rājacūya ceremony at which the sacrificial sword which is made over to the king is passed on by him first to his brother and then to the Sūta, Sthapa'i, Grāmanī, and Sajātā (royal kinsman) [*Sata. Br.*, v, 4, 4, 15-19].

It is not, however, certain whether these various names indicated the king's courtiers and private servants, or public functionaries. The $S\bar{u}ta$ usually taken to be the charioteer, $S\bar{a}rathi$, or master of the horse, might also be the minstrel or court poet, in view of the epithets *ahanti*, non-fighter [$V\bar{a}ja$. $Sainhit\bar{a}$, xvi, 18], *ahantya* [Taitti. Sain, iv, 5, 2, 1] or *ahantva* (=*ahanya*, "inviolable") [$K\bar{a}thaka$, xvii, 2] applied to him in the texts. In the Epics, he definitely figures in this capacity. The $Gr\bar{a}man\bar{a}$ similarly appears as a m litary official already in the *Rigveda*. The position is described as the summit of presperity for a Vaisya [Taitti. Sain, ii. 5, 4, 4] and as such must have meant the headship of the village in matters both civil and mi itary. The $Gr\bar{a}man\bar{a}$ proper or *par excellence*, who was one of the king's entourage, was probably regarded as representing rural interests in the ministry, just as the industrial interests were represented by the Karmāra, the military by the Senānī, Rathakāra, and Sūta, and financial by the Samgrahītri and Bhāgadugha. The Akshāvāpa may be also similarly taken as "a public officer who superintends the gambling halls of the State and collects the revenue (due therefrom), as was regularly done later on" [Vedic Index, ii, 200 n]. Kautilya, for instance, mentions the Dūtādhyaksha as one of the chief officers of the State. The fact was that the officers of the king's household were developing into Ministers of State, as is seen in early English history too.

An officer not mentioned among the Ratnins was the Sthapati. We read of the Sthapati named Chākra who was powerful enough to help his master, Dushtarītu, to the throne, from which he was expelled by his rebellious subjects, the Srinījayas [Sata. Br., xii, 8, 1, 17]. Thus Sthapati is taken to mean a local governor, as in the expression Nishāda-Sthapati, used in the Sūtras [\bar{A} pastamba Srauta Sūtra, ix, 14, 12]. But as he ranks below the Sūta, he is more usually taken as "chief judge", exercising both executive and judicial functions.

Popular Assemblies: The Sabhā. The popular Assemblies known as the Sabhā and the Samiti are described in the Atharvaveda [vii, 12, 1] as the twin daughters of God Prajāpati to indicate that they were the original and earliest institutions of Indian polity. A member of a Sabhā is called a sabheya, sabhāsad, or sabhāsīna. The Speaker of the Sabhā was called Sabhāpati [Vāja. Sam., xvi, 24]. The Sergeant of the Assembly was called the Sabhā-pāla [Taitt. Br., iii, 7, 4, 6].

The Sabhā was so important to the king that even God Prajāpati could not do without it [Chhāndogya Upanishad, viii, 14, 1]. We read of Rishi Gautama going to the Sabhā to meet the king there $\{ib., v, 3, 6\}$. The Satapatha Brāhmana $\{iii, 3, 5, 14\}$ tells of a king of kings holding his Sabhā to which the subordinate kings flock together.

The Sabhā functioned as a parliament for disposal of public business by debate and discussion. Accordingly, eloquence and debating skill were greatly valued and prayed for [Av., vii, 12]. There is a prayer that one may "speak agreeably to those assembled" $(ch\bar{a}ru \ vad\bar{a}mi \ samgateshu)$; "that the members of the Sabhā be of one voice with the speaker"

(ye te ke cha sabhāsadaste santu savāchasah); "that the speaker may hold the Sabhā spell-bound by drawing unto himself ($\bar{a}dade$) the enlightenment (varchah) and the wisdom (vij- $\bar{n}anam$) of all its members (sabhāsīnānām)"; "that the attention of all the members of the Sabhā may be riveted on one's speech, the delight of all" (mayi vo ramatāni manah) [ib.].

There were rules of debate, of which violation is referred to in a passage in the $V\bar{a}jasaneyi~Samhit\bar{a}$ [iii, 45; repeated in xx, 17]. "Rebuke administered to the great men of the Sabhā" (mahājana-tiraskārā-dikam) is instanced by the commentator as an example of such violation, of "sins against the assembly".

Decision by the vote of the majority was known, as is indicated by the term Narishtā applied to the Sabhā in the Atharvaveda [vii, 12, 3], which Sāyana explains as "inviolable, not to be overridden" (ahimisitā parainanabhibhāvyā), because in the Sabhā, "the many meet and speak with one voice which is binding on others" (bahavalı sambhūya yadi ekam vākyam vadeyulı tat hi na parailı atilanighyam).

Lastly, the Sabhā seems to have also functioned as a court of justice. The Vājasaneyi Samhitā [xxx, 6] mentions the Sabhachara as being dedicated to Dharma or justice. The term, therefore, may be taken to mean "one who attends the Sabhā sitting as a law court to dispense dharma or justice", like the other technical term Sabhā-sad used in the texts [At. iii. 29. 1: vii. 12, 2; xix, 55, 6; Autareya Br. vii. 21, 14, etc.). which cannot denote any member attending the Sabhā but the assessor deciding legal cases in the Sabhā. Perhaps the term may be further differentiated to denote the Elders, or heads of families forming the Sabhā which met to administer justice more frequently than for general business. In this connection may be recalled the passage in the Rigveda [x, 71, 10] which refers to a person returning from the Sabhā in joy, being acquitted of blame [kilvisha (sin)-spiit (touched by) pitushanih (absolved of guilt)]. In the Pāraskara Grihya Sūtra, the Sabhā is given the names of nādi and tvishi, i.e. sounding and shining. The sound is due to proclamation of justice (dharmamitupanat) and the blaze to the fire which is kept in the court house for purposes of ordeals.

The Taittiriya Samhitā [ii, 3, 1, 3] mentions the village judge (Grāmya-vādin) and the Maitrāyanī his Sabhā or Court [ii, 2, 1].

The Samiti. We have already seen how the Atharvaveda [vii, 12] describes both the Sabhā and the Samiti as the twin creations of Prajapati, i. e. as primæval institutions. This is probably the earliest reference in literature and history to democratic institutions, together with the references of the Regreda already ci.ed. The evidence, however, is not clear as to how the Samili differed in composition and functions from the Sabhā. Perhaps the Sabhā was a smaller and select body of Elders and functioned usually as a law court, while the Samiti was the larger, general assembly of the people. Accordingly, it is referred to as expressing the voice of the vis, or people, in the choice of their king in seve al passages of the Atharvaveda. In one, it is the Samili that chooses the king (dhruvāya te samitih kalpatāmiha), and in another it withdraws that choice for the king's misdeeds and tyranny (nasmai samilih kalpate) [vi, 88; v, 19]. It is also s ated that the support of the Simili is essential to the king to subdue his and make his position firm on the throne enemies (dhruvochvutah) [vi. 88, 3].

Learning and Education. The period, as we have seen, witnessed the growth of a vast and varied literature registering in some of its works, the *Upanishads*, the highest level of intellectual attainments, which was no doubt the outcome of schools remarkable for the efficacy and fruitfulness of their methods of teaching. These have not received the altention they deserve, nor are they directly described in any of the numeious works of the period. They are to be deduced out of stray passages, indirect allusions, or incidental illustrations contained in the texts of the period.

Rules of Studentship in the Atharvaveda and Yajurveda. The system is first adumbrated in the Atharvaveda [xi, 3; also vi, 108, 2; 133, 3]. First, there is the ceremony of Upanayana by which the teacher, $\bar{a}ch\bar{a}rya$, initiates the pupil, brahmachārī, into a new life described as a second birth, whence he becomes a dvija, twice-born. By Upanayana the brahmachārī is endowed with a spiritual body (Vidyāmaya-Šarīna as explained by Sāvana) as distinguished from the physical body given him by his parents. The new life has its own marks and rules for the pupil. He wears the skin of the black antelone (kārshnam vasanah), the girdle (*mekhalā*) of Kuša grass (mauñivā) and lets his hair grow long (dirghaśmaśru). He has also to collect fuel (samit) to offer both morning and evening to Agni or sacrificial fire by which he himself becomes enlightened (samidhā samiddhah, i.e. sandīpitah, "illumined," according to Sāyana). Begging (bhikshā) is also one of his duties. He has also to practise control of the senses (sama) and austerities (tabas). By his tabas he sustains (pipar:i) his teacher, who is responsible for his sins ("sishyababam gutor pi"). His is thus a strictly regulated (dikshita) life. There is also a reference to the pupil pleasing his preceptor by grateful gifts [xi, 3, 15]. The aims of learning are stated to be śradulhā (faith), medhā (retention of knowledge acquired), prajā (progeny), dhana (wealth), avuh (longevity), and amritatea (immortality) [xix, 64]. They thus comprehended success in both secular and spiri ual life. There is, last'y, a reference to suspension of study in certain times and places-"in cloudy (antariksha) or windy (vata) weather, under shade of trees (vriksheshu), in sight of green barley (ulap(shu), or within hearing of cattle" [vii, 66].

The Yajurveda [Taitti. Sain. vi, 3, 10] refers to brahmacharya, or studentship, by which the debt to Rishis or to culture has to be paid, just as the debt to the gods is to be paid by sacrifices (yajna) and that to ancestors by progeny (prajaya).

The Rules in the Brāhmaņas. All these features of the educational system are repeated in later texts. The essence of the system was that the student had to take up residence in the home of his teacher and was hence called an *antevāsī* [*Brihad. Up.*, vi, 3, 15] or *āchārya-kulavāsī* [*Chhāndogya Up.*, ii, 23, 2]. There his main duties were to beg for his teacher [*Chhāndogya Up.*, iv, 3, 5], to look after the sacrificial fires [*ibid.* iv. 10, 2], and tend the house [*Sata, Br.*, iii, 6, 2, 15] and also his cattle [*Chhāndogya Up.*, iv, 4, 5]. According to *Satapatha Brāhmaņa* [xi, 3, 3, 5], tegging for alms was prescribed for the pupil, to produce in him a spirit of humility,

and tending fires, for "enkindling the mind with fire, with the holy lustre" [*ib.* xi, 5, 4, 5]. Tending cattle would give, the pupil wholesome exercise in open air, training in dairy-farming, and other accomplishments. The pupil was not to sleep in day-time [*ib.*].

Domestic Schools. The age at which studentship commenced and its period are not always the same. Svetaketu commenced study at twelve and continued it for twelve years [*Chhāndogya Up.*, vi, 1, 2]. Upakośala also studied for twelve years under his teacher, Satyakāma Jābāla [*ib.*, p. 10, 1]. Longer period of study, such as thirty-two years, and study for whole life, are also mentioned [*ib.*, viii, 7, 3, 15].

Charakas. Besides these domestic schools or small homes of learning run by an individual teacher who would choose his own pupils, the texts refer to other educational agencies. The end of formal studentship was not the end of education. The Taittiriva Ubanishad [i. 11] contains a remarkable exhortation addressed by the teacher to his parting pupil (anticipating a modern University Rectoral or Convocation Address) in which the pupil is asked "not to neglect the study, learning, and teaching of the Veda". There were many educated men who as householders carried on their quest of knowledge by mutual discussions or seeking the instruction of distinguished specialists and literary celebrities at different centres. These wandering scholars are called the Charakas [Brihad. Up., iii, 3, 1] who were the real educators of the country [Sata. Br., iv, 2, 4, 1]. The texts mention many typical examples of these. Uddalaka Aruni of the Kuru-Pañchāla country goes to the north, where in a disputation to which he challenges the northern scholars, he has to vield in their leader. Saunaka [ib., xi, 4, 1, 24]. He also spont some time in the land of the Madras in the north to receive instruction from their learned philosopher, Patañchala Kāpya [Bri. Up., iii, 7, 1]. "Five great householders and theologians came out together and held a discussion as to what is our Self and what is Brahman," and then went together to the sage Uddālaka Āruni and to the King Asvapati Kaikeya for instruction on the subject of Vaisvanara [ib., x. 6, 1, 12: Chhandogya Up., v. 11]. Narada, after completing the study

of all the sciences and arts of his times, seeks further instruction from Sanatkumära [*Chhāndogya Up.*, vii, 14].

Parishad. We also read of regular organizations for such advanced study, like the Pañchāla Parishad, an Academy patronized by the king of the country, Pravāhana Jaivali, who daily attended its meetings [ib., v, 3; Brihad. Up., vi, 2, 1-7].

Learned Conferences. Besides these residential schools. academies for advanced study, and circles of philosophical disputants, a great impetus to learning came from the assemblies of learned men gathered together by kings. A typical example of these was the Conference organized by King Janaka of Videha in connection with his horse-sacrifice to which he invited all the learned men of the Kuru-Pañchāla country. The leading figure in that Conference was Yājnavalkya, to whom difficult metaphysical problems were put by eight leading philosophers of the times, viz. (1) Uddālaka Aruni, who was the centre of a circle of scholars contributing most to the philosophy of the Upanishads; (2) Asvala, the Hotri priest of king Janaka; (3) Artabhaga; (4) Bhujvu, a fellow-pupil of Āruņi senior; (5) Ushasta; (6) Kahoda: (7) Sākalva and (8) Gārgī, the learned daughter of Vachaknu. The satisfactory solutions which Yājñavalkya gave to all the problems put to him won him the palm of supremacy among the philosophers of his times and the king's reward of 1.00? cows with their horns hung with gold coins (5 paces or padas to each) [$B\tau i$, Up.].

An Example of Education : Yājňavalkya. Indeed, the life of Yājňavalkya very well illustrates the educational agencies and conditions of the times. He started as the pupil of Uddālaka Āruņi whose son, Švetaketu, was one of his fellow-disciples. Next, we find him wandering through the country with his companions, Švetaketu, and Soma Šushma, till they meet on the way King Janaka of Videha who defeats them in argument. While the other two hold back, Yājňavalkya, a true seeker after Truth, drives after the king and has no hesitation in receiving instruction from him, a Kshatriya. After instruction, the Brāhmaņa pupil, Yājňavalkya, offered a boon to his Kshatriya teacher, the king, who answered : "Let mine be the privilege of asking questions of thee when I list, O Yājñavalkya !" [Sata. Br., xi, 6, 2]. We next find Yājñavalkya figuring in the Philosophical Congress called by Janaka, as described above, and establishing his superiority to his teacher. Uddālaka. We then find him teaching King Janaka, another of his former teachers, on three occasions. Janaka was taught six different definitions of Brahman by six teachers named Jitvan, Udanka, Barku, Gardabhīvipīta, Sa'yakāma, and Sākalya. Yājfipvalkya taught him the Upanishads or hidden attributes behind those definitions. On the next occasion, King Janaka sought his instruction on the question, "Whither will you go after dea h?" On Yājñavalkya's reply to this question, Deussen says : "Nor have we even today any better reply to give" [Philosophy of the Upanishads, p. 901. The king was so much moved by it that he offered his preceptor his entire kingdom as a gift, with himself as slave! On the third occasion, Yājñavalkya delivers to the king his last discourse on Brahman, to attain Whom one must free himse'f from desire. "Knowing this, the people of old did not wish for offspring. What shall we do with offspring, they said, we who have this Self and this world of Brahman?" Again : "The Atman is that which is without and above hunger and thirst, sor ow and passion. decay and death. Realizing that Atman. B ahmanas conquer the desire for progeny, for wealth, and possessions, and even for heaven, and embrace the life of renunciation as homeless mendicants, subsisting by the strength which the knowledge of Atman alone gives; then they devote themselves to contemplation till they are ultimately merged in the Brahman" [Br. Up.].

Yājñavalkya was not slow to apply to himself his teachings. He had two wives, Maitreyī and Kātyayanī, whom he called one day, and said : "Verily, I am going away from this my house into the forest. Let me make a settlement between you !" Maitreyī, however, asked him : "My Lord, if this whole earth, full of wealth, belonged to me, tell me, should I be immor al by it or ro?" "No," replied Yājñavalkya, "there is no hope of immortality by wealth." Then Maitreyī said : "What should I do with that by which I do not become immortal? What my Lord knoweth of Immortality, tell that clearly to me." Yājňavalkya then gave to his wife. Maitreyī, instruction on Brahman and then retired to the forest [Br. Up., iv, 6].

The learning or culture of ancient India was chiefly the product of her hermitages in the solitude of the forests. It was not of the cities. The learning of the forests was embodied in the books specially designed as *Āraŋyakas*, "belonging to the forests." Indian civilization in its early stages had been mainly a rural, sylvan, and not an urban, civilization.

Women and Kshatriyas in Education. Two features in this educational system should not be missed. The first is the part taken in intellectual life by women like Gargi who could address a Congress of Philosophers on learned topics. or like Maitreyi, who had achieved the highest knowledge. that of Brahman. The Rigveda shows us some women as authors of hymns, such as Visvavāra, Ghoshā, and Apālā. The second feature is the part taken by Kshatrivas in intellectual life, by kings as patrons and devotees of learning. The most famous of these was King Janaka of Videha, whose contributions to learning have been already indicated. There was also the Pañchala king, Pravahana Jaiva'i, who taught Brāhmana scholars like Šilaka, Dālbhya [Chhāndogva Ub., i. 8]. Svetaketu and his father Uddalaka [ib. v. 3]. King Asyapati Kaikeya was another learned king teaching Brahmana pupils [ib., v. 11]. So also was King Pratardana [Kaushi. Br., xxvi, 5]. Nārada, the foremost Brāhmana scholar, with all his learning, had to seek the instruction of Sanatkumara on Atman [ib., vii, 1]. Sanatkumära told Närada that what he had hitherto studied was mere words, that he was a Mantravit but not an Atmavit. The Arunis, father and son, once sought the teachings of King Chitra-Gāngāvani [Kaushītaki Up., i, 1]. Another learned king mentioned is Janaśruti Pautrāyana [Chhāndogya Up., iv, 2, 3]. Another was King Brihadratha [Maitrāyani Up.]. Ajātašatru, King of Kāśi, was another very learned king whose superiority and publiage were acknowledged by that distinguished Brähmana scholar. Dripta-Balaki Gargya, whose fame for learning was known all over the country, to the Uśīnaras, Satvat-Matsyas, Kuru-Pañchālas, and Kāśī-Videhas [Brihad. Up., ii, 1, 1].

Recitation of Texts. The methods of education addressed themselves to the conservation of sacred texts by oral tradition. The need of recitation was paramount. It was started by students before birds announced break of day (putā-vayabhyah, i.e. pakshādīnām vāgvadanārambhāt prāk; T. S., vi, 4, 3, 1; A. B.; ii, 15]. The Aitareya Aranyaka [viii] recalls the Rigvedic passage of frog-like $(m\bar{a}nd\bar{u}kva)$ mode of recitation, and refers to three ways of reciting the Rigveda. pratrinna, nirbhuja, and ubhayamantarena, by taking the words singly or in pairs or in a continuous way, corresponding respectively to the Samhita, Pada, and Krama pathas already explained. There was developed a sound system of phonology. The Aitareva and Satabatha Aranvakas already distinguish sounds as ghosha, \bar{u} shman, and $vya\bar{n}jana$, dental and lingual n, and the sibilants s. sh. and s. and discuss rules of Sandhi or combination of sounds. The Upanishads go further by recognizing phonological factors like matra (quantity), balam (accent), sāma (euphony), and santāna (relations of letters) [T.U., 1, 1, 2]. Prayers were offered for memory, medhā: "May the Lord endow me with medha; may we learn much and learn by the ear and may we retain what we have thus learnt" [ib., i, 4]. Texts were recited loudly at noon [T.A., ii, 11, 15]. Purity of speech was a mark of culture. An Arvan family was barred out of priesthood for its apūta (impure) speech [A.B., vii, 2, 7; S.B., iii, 21].

Literature explanatory of Texts. Mere recitation of texts without knowing their meaning is condemned in the *Rigveda* [x, 71, 5] which describes it as "bearing speech without fruit or flower", and also in Yāska's *Nirukta* [i, 18], which compares it to a pillar (*sthāņu*) supporting a hall, or to a bearer of burden (*bhārahāra*).

There was thus a great growth of literature explanatory of the Vedic texts, of subjects like the six *Vedāngas* and the *Upavedas* like the *Dhanurveda*, *Gandharvaveda* (evolved from the *Sāman* chanting), etc. These were associated with one or other of the four schools of Vedic interpretation pointed out by Yāska, viz. Aitihāsika (his orical), Ādhyātmika (spiritual), Ādhiyājāika (ritualistic), and Svābhāvika (natural).

Interpretation through Discussion. Interpretation of texts was the outcome of discussion depending on (a) the *Praśnin* (questioner), (b) the *Abhi-praśnin* (cross-questioner), and (c) the *Praśna-vivāka* (answerer), as stated in the *Taittirīya Brāhmaņa*. The *Atharvaved*. refers also to the *Prāvāchika* (cf. *Nirvachana*, whence *Nirukta*).

Various Subjects of Study. The texts mention the subjects of study then developed. A good list of these is given in Chhandogya Upnishad [vii, 1]. It includes (1) Rigveda, (2) Yajurveda, (3) Sāmaveda, (4) Atharvaveda, (5) Itihāsa and Purāna, described as the fifth Veda. (6)Vyākarana, described as the Veda of Vedas. (7) Pitrva, dealing with Sraddha or funeral rituals, (8) Rasi, or Science of Numbers. (9) Daiva, or science of portents. (10) Nidhi. exp'ained as mineralogy. (11) Vākovākya, i.e. Tarka-Sūstra or Science of Logic. (12.) Ekäyana i.e. Niti-Sastra or Science of Ethics. (13) Devavidyā, explained as Nirukta or exegetics, or as the science of worship of gods, (14) Brahma-vidyā. the knowledge relating to Brahma or the three Vedas and hence explained to mean the Vedangas like Siksha (phonetics), Kalpa (ritualism), and Chhandas (prosody), (15) Bhūta-Vidyā, biology, (16) Kshatra-vidyā, military science, (17) Nakshatra vidyā, astronomy, (18) Sarpa-vidyā, or Garuda-vidva, the science dealing with poisons. (19) Devajana-vidya, the arts affected by the lesser gods such as perfumery, dancing, singing, playing on musical instruments (vādva), and other fine arts and crafts (silpādi-vināna). Some split up the compound into Deva-vidva or musical arts and Ianavidya or Ayurveda, medicine.1 Valuable medical material is found in the Atharvaveda verses describing diseases like fever [v. 22].

¹ Some of these subjects of study are ascribed to contact with the non-Aryans, subjects like Sarpa-vidyā, Devajana-vidyā, Bhūta vidyā in the sense of Pišācha-vidyā [as explained in Āšvalāyana Grihya Sūtra], Daiva-vidyā the art of hypnotizing and mesmerizing, in which the Nāgas excelled as stated in the Taittirīva Brāhmana [ii, 4], or Asura-vidyā mentioned in the Satapatha Brāhmana. The HC--6

Different Texts and Schools. It is to be noted that all this literature was the outcome of the various schools of Vedic study and interpretation functioning all over the country. Firstly, the sacred texts were preserved and propagated by various families in different parts of the country, which were known as the Kulas and Golras. Next, there were other institutions in which teachers and students came together in a different relationship which was not that of blood. These were known as \hat{Sakha} and *Charana*. The \hat{Sakha} was the Vedic school of students studying the same text of the Veda. The Rigveda was studied in a variety of Sakhas, each of which adhered strictly to its own text of the Rigveda. As the text of the Vedas differed in different schools or Sakhas, so also, and more widely, did the texts of the corresponding Brahmanas studied in the schools called Charanas. Each such Charana had its own arrangement of texts, its own manner of application of the texts to rituals, and its own rules of conduct and discipline for its members. These Sakhas and Charanas, based on slightly different texts, were very useful in preserving the purity of their respective texts.

Supreme Knowledge. The Mundaka Upanishad classes all these subjects of study under Aparā-vidyā, including in it even the four Vedas and the six Vedāngas, Sikshā (phonetics). Kalpa (ritualism), Vyākaraņa (grammar), Nirukta (exegelics). Chhandas (metrics), and Jyotisha (astronomy). It reserves the term parāvidyā for the highest knowledge, the knowledge of the Ātman, the real subject-matter of the Upanishads, which is sarva-vidyā-pratishthā, the foundation of all sciences and arts, the vedānta, the final and highest stage of Vedic wisdom [Mundaka Up., i, 1, 2, 3; iii, 2, 6]. Nārada forgetfully acknowledges that all his learning in the Vedas and other

Copatha Brāhmaņa [i, 10] mentions Sarpa-vidyā, Asura-vidyā, and Pišācha-vidyā, along with Itihāsa and Purāņa, as the five newly created Vedas. This only indicated the cultural fellowship of the Aryan and non-Aryan. This is also shown by the mention in connection with purusha-medha in the Taittirīya Brāhmaņa [iii, 4, 2, 13] of non-Aryans 1 ke the Sūta, Magadha, Ritula (narrator of tales of kings and countries) who were the educators of the masses, along with the wit, the buffoon, the dancer, engineer or architect. subjects has left him ignorant of the true knowledge, that of the Atman, by which he can cross the ocean of suffering [Chhāndogya, vii 1]. The Kaţha Upanishad plainly states that "not by the Veda is the Atman attained, nor by intellect, nor by much knowledge of books", and condemns all as $apar\bar{a}$ $vidy\bar{a}$ in which the Vedas are included as a- $vidy\bar{a}$, as not true knowledge. The Vedic religion of sacrifice has been accordingly valued very little in some of these Upanishads. The Mundaka [i, 2, 7] brands as fools those devoted to mere rites and ceremonies. In the same strain, the Brihadārunyaka [i, 4, 10] likens those offering sacrifices to gods to animals ministering to the comforts of their owners. In the Aitareya Aranyaka [ii, 2, 6] we read : "To what end shall we re-eat the Veda, to what end shall we sacrifice ? For we sacrifice breath in speech or in breath speech."

How it can be a tained. Thus education aimed at the highest knowledge, the knowledge of the Atman or the absolute. or self-realization. Such knowledge was not attainable within the limits of formal pupilage, of the first asrama or stage of life. It depended on a dedicated life. Its foundations were Laid in the life of brahmacharya. Its attainment required much further and longer effort. As stated in the Brihadāranyaka [iv, 4, 22], "Brahmanas seek to know him by the s'udy of the Veda, by sacrifice, by gifts, by penance, by fasting, and he who knows him becomes a Muni. Wishing for that world (of Brahman) only, mendicants leave their homes. Knowing this, the people of old did not wish for offspring and they, having risen above the desire for sons, wealth, and new worlds, wander about as mendicants." In the Katha [ii, 15], all the Vedas, all the practices of tabas and brahmacharya, are described as means by which the One is to be attained and in the Mundaka [ii, 1], lapas, śraddhā, salva, brahmacharya, and vidhi. The Maitrayani Upanishad [iv. 3, 4] describes Jñāna as the result of vidyā, chintā, and tapas. The Taittiriva Upanishad [iii] declares: "By taias seek to know Brahman." Yäjñavalkya, as we have seen, even af er achieving fame as the greatest philosopher, renounced the world and retired into forest to practise tapas for knowing the Brahman. All these passages indicate that while the aim of

education was the knowledge of the highest truth and ultimate reality, it could not be ordinarily realized except by the consecrated efforts of a whole life in all its four Āśramas of the Student, the Householder, the Anchorite, and the Sannyāsī.

In the Kalhopanishad, Yama did not impart to Nachiketas the highest knowledge before testing his zeal for it. He tried to wean him away by offering him all a mortal could desire : "Sons and grandsons who shall live a hundred years, herds of cattle, elephants, horses, gold, sovereignty of the earth, fair maidens, and even control over death." But Nachiketas answered : "Keep thou thy horses, keep dance and song for thyself. No man can be made happy by wealth." Then Yama admitted : "I believe Nachiketas to be one who desires knowledge, for, even many pleasures did not tear him away." King Jānaśruti brought to Raikva a present of 600 cows, a necklace, and a carriage with mules, but Raikva snubbed him : "Fie, necklace and carriage be thine, O Śūdra, together with the cows" [Chhān., iv, 2].

These stories are typical of the inner development required for a knowledge of the highest truths.

Religion : Growth of Rituals and Priesthood. The $Br\bar{a}hmanas$ record a great growth of ceremonial religion and the consequent growth of priesthood. From the simplest Soma sacrifice occupying one day, there were now many others culminating in the Sattras lasting from twelve days to a year or years. The *Rigreda* knows of seven priests. Hotri, Fotri, Nethtr, Agnīdh, Prašāstri, Adhvaryu and Brahman [ii, 1, 2], and the other two Sāman priests called Udgātri and his assistant, the Prastotri [viii, 81, 5]. Now the sacrifices required seventeen priests classified as under :

(1) Hotri, with Maitrāvaruņa, Achchhāvāka, and Grāvastut.

(2) Udgātri, with Prastotri, Pratihotri, and Subrahmanya.

(3) Adhvaryu, with Pratishthātri, Neshtri and Unnetri.

(4) Brahman, with Brähman, and Potri. The seventeenth Ritvij was the Sadasya who superintended the whole sacrifice as its presiding priest. The

Adhvaryu had three other assistant priests of lower rank, viz. the samitri (the slayer), the Vaikarta, and the Chamasādhvaryu.

Symbolism of Rituals. Some of the rituals are informed by a new spirit of symbolism and spirituality. This is evident in connection with the building of the altar for sacrifice and for the sacred fire. The building is elaborated in the texts out of all reason and utility, because it was to symbolize the constitution of the unity of the universe. The symbolism was originally suggested by the Purusha hymn of the Rigveda presenting the conception of the creation of the universe from the Virāt Purusha. In the Brāhmanas, Prajāpati stands for Purusha and "the sacrifice is conceived as constantly recurring in order to maintain the existence of the universe. To render this possible is the end of the fire altar, the building of which is the reconstruction of the universe in the shape of Prajāpati, Prajāpati, again, is identified with Agni, the fire of the altar, and both Prajapati and Agni are the divine counterparts of the human sacrificer. But Prajapati is himself Time, and Time is in the long run death, so that the sacrificer himself becomes death, and by that act rises superior to death, and is for ever removed from the world of illusion and trouble to the world of everlasting bliss. In this the true nature of Prajanati and of the sacrificer is revealed as intelligence, and the Satapatha Brāhmaņa urges the seeker for truth to meditate upon the self, made up of intelligence and endowcd with a body of spirit, a form of light and an ethereal nature [Cambridge History of India, I, 142].

Doctrines of $M\bar{a}y\bar{a}$, Karma, Transmigration, Mukti, and Atman in the Upanishads. This same doctrine has been taken up and elaborated in the *Upanishads*, which deal with Brahman or Atman as the only, underlying, and ultimate Reality, as stated above. Indeed, the *Upanishads* really expound a new religion which is opposed to the sacrificial ceremonial, and represents the philosophic aspect of Hinduism for about 2,500 years. They aim at the achievement of deliverance from mundane existence by the absorption of the individual soul ($\bar{a}tm\bar{a}$) in the world-soul (*brahma*) by virtue

of correct knowledge. For such an aim, ritual is useless and saving knowledge, all-important. Earthly rewards or heavenly blisses are not thought of at all in this scheme. The identity of the individual *atman* with the world *atman* is asserted in statements like Tat tvam asi, "That art thou" [Chhāndogya]. "Brahma or the Absolute is grasped and definitely expressed for the first time in the history of human thought in the Brihadāraņyaka Upanishad" [Macdonell in India's Past, p. 46]. The conception of the material world as $M\bar{a}v\bar{a}$ or illusion first finds expression in the later Svetāsvatara Upanishad. though it is inherent in the oldest also. Lastly, the doctrine of transmigration also appears first in the Satapatha Brahmana where it is stated that retribution follows in the form of repeated births and deaths and is elaborated in the Upanishads which offer to the ascetic, possessed of true knowledge, "the path of the gods" leading to absorption in Brahma, and to pious householders, lacking that supreme knowledge, "the path of the fathers," followed by rebirth on earth in various forms depending on their karma. Thus we find that in this age were enunciated the leading doctrines of Hinduism, those of transmigration, karma, māyā, and mukti or final release by absorption in Brahma.

Emergence of deities, Rudra and Vishnu. Parallel with the development of this philosophy, there was also in progress the movement which leads to the religions of modern India, the emergence of Rudra and Vishnu as the great gods. Prajāpati was now yielding to Rudra, figuring as a popular dei'y already in the Yajurveda, while the Aitareya Brāhmana brines up the Bhūtapati, representing the dread forms of the gods, and an aspect of Rudra's activities as the slayer of Prajāpati. The growing position of Vishnu is indicated by his iden ification with sacrifice, a sign that he counted for much in Vedic life.

CHAPTER VI

CIVILIZATION AS REVEALED IN POST-VEDIC LITERATURE : THE SŪTRAS, EPICS, AND LAW-BOOKS

Age. These three classes of works, making up later Brihmana literature, date roughly from 800 B.C.,¹ though some of their representative works in their extant form belong to much later dates. The materia' is much older than the works in which it is transmitted and, broadly speaking, this post-Vedic literature gives a picture of ancient Hindu civilization as it was fixed in its normal form before the rise of Jainism and Buddhism.

Sutras. The Sutras were manuals of instruction in the form of brief rules strung together ($s\overline{u}tra$ =thread). They conveyed the maximum of matter in the minimum of words and helped to preserve the vast sacerdotal literature by giving its essence in a form convenient to memory. The first Sutra works were the Vedangas comprising the six subjects of Kalpa (religious practice), Sikshā (phonetics), Vyākarana (grammar), Nirukta (etymology), Chhandas (metre), and Ivotisha (astronomy). All of these aim at explaining, preserving, or practically applying the sacred texts. The most important of these works are the linguistic works which deal with phonetics. derivation, and grammar. Of these the most valuable and still extant are Yaska's Nirukta, the earliest specimen of classical Sanskrit prose, and Pāņini's Ashļādhyāyi, the starting point of post-Vedic Sanskrit literature, and dominating its entire course, though it bases itself on the usage of the Brahmanas. Ubanishads, and Sütras and not that of classical Sanskrit, and deals with Vedic Grammar in the form of exceptions to classical Sanskrit. The other Sūtra works arise out of the

¹ "Although the chronology of the legal literature is uncertain, it can be assumed with probability that the older Dharma Sūtras belonging to the Vedic schools date (rom between 800) and 300 B.C." [Macdonell, India's Past, p. 161]. Vedānga called Kalpa, and fall into three classes: (a) the *Srauta* Sūtras dealing with the great ceremonies involving for their performance a number of priests; (b) the *Grihya* Sūtras dealing with the domestic sacrifices and rites performed by the *grihī* or householder; and (c) the *Dharma* Sūtras which enunciate customary law and practice.

Picture of Civilization in Pāņini's Grammar : Its Date. Pāņini's grammar throws some light on the history of its times. His date was thought to be earlier than 700 B.C. by Goldstucker on the ground that he was acquainted only with the three Vedic Samhitās and the *Nighaņţu* (Yāska's *Nirukta*). Sir R. G. Bhandarkar was for the same date on the ground that Pāṇini dces not show much acquaintance with the Deccan. According to Macdonell [*India's Past*, p. 126], "the date of Pāṇini is usually assumed to be about 350 B.C., but the evidence for this is very doubtful; it is perhaps safe to say that he lived after, probably soon after, 500 B.C."

Geographical Horizon. Pāņini's geographical horizon extending to Kalinga [iv, 1, 70] in the east, to Sind [iv, 3, 32] and the Cutch [iv, 2, 132] in the west, and to Taxila [iv, 3, 93], Aśmaka [iv, 1, 173], and the Swat Valley [iv, 2, 77] in the north-west. The different regions in States were called *Janapadas*, of which he mentions twenty-two, including Kekaya [vii, 3, 2] Gändhāra [iv, 1, 169], Kāmboja [iv, 1, 175], Madra [iv, 2, 131], Avanti [iv, 1, 176], Kuru [iv, 1, 172; 2, 120], Śālva [iv, 1, 173], Kosala [iv, 1, 171], Bhārata [iv, 2, 118; viii, 3, 74], Ušīnara [iv, 2, 118], Yaudheya [iv, 1, 178], Vriji [iv, 2, 131], and Magadha [iv, 1, 170]. Besides these, Fāṇini refers to *Prāchya Jerephadas* [iv, 1, 178] or eastern States which, according to *Kāšikā*, comprised Pāñchāla, Videha, Anga, and Vanga.

Administrative Divisions. These States were named after their Kshatriya peoples [iv, 1, 163]. The Kshatriya rulers were called Jānapadins [iv, 3, 100]. The citizens of the same State, or Janapada, were called Sajanapadāk [vi, 3, 85]. As the State was represented in the ruler, loyalty to the State was synonymous with loyalty to its ruler [iv, 3, 100]. There was thus a lively sense of patriotism in those days. The different *Janapadas*, or States, were separated by well-defined boundaries [iv, 2, 124].

Below the Janapada were the administrative divisions called Vishaya [iv, 2, 52], Nagara and Grāma. A village was named after its $Gr\bar{a}man\bar{n}$ [v, 2, 78].

Literature then Known. Pāņini refers to Rīgveda [vi, 3, 55], Sāmaveda [i, 2, 34] and Yajurveda [ii, 4, 4]; to the sākala sākhā of the Rīgveda [iv, 3, 128], its padapātha [iv, 2, 61] and its divisions into Sūktas, Adhyāyas, and Anuvākas [v, 2, 60]; to the Kāthaka recension of the Biack Yajurveda [vii, 4, 38].

jHe knows of $Br\bar{a}hmana$ works and refers to two containing thirty and forty $adhy\bar{a}yas$ [v, 1, 62], supposed by Keith to be the 'Aitareya and Kaushītakī $Br\bar{a}hmanas$.

He mentions Chhandas works of Rishis like Tittiri, Varatantu (whose disciple, Kautsa, was of Yāska's time), Kašyapa and Kaušika, šaunaka, of Katha and Charaka, Kalāpi and Chhagalin, of the pupils of Kalāpi and Vaišampāyana [iv, 2, 101-9].

As regards $S\bar{u}tras$, he knows of $Kalpa S\bar{u}tras$ [iv, 3, 105] of ancient authors (*purāņa-prokta*) and mentions recent works like the Bhikshu-Sūtras of Parāśara and Karmanda and the Naţasūtras of Silālin and Kriśūśva [iv, 3, 110, 111].

He knew of a wide variety of secular literature comprising drama [e.g. Sisukrandīya in iv, 3, 88], *Sloka* [iii, 1, 25], *Gāthā, Kathā* [iv, 4, 102] or *Mahābhārata* [vi, 2, 38].

He knew of the literature of $Vy\bar{a}khy\bar{a}na$ or commentary such as works giving details of *purodāša* [iv, 3, 70], grammatical works dealing with nouns ($n\bar{a}ma$) and verbs [iv, 3, 72], Chhāndasa works and those called $\bar{A}rch.ka$ (relating to hymns) or $\bar{A}dhvarika$ (relating to sacrifices).

All these various works are classified by Pānini under (1) D_{rishta} ("revealed", i.e. $\delta ruti$), (2) Prokta ("compiled", "enounced", i.e. secondary works), (3) Upajnata and $K_{T}ta$ ("originated" and "composed"), and (4) Vyakhyana or "explanatory" works.

Education. The ceremony of initiating was called āchārya-karaņa [i, 3, 36]. The pupil was called a chhātra because he was protected from all evil by his teacher [iv, 4, 62]. Pupils of the same teacher were called *satīrthyas* and *sabrah-machāriņas* [vi, 3, 85]. They are named after their teachers, e.g. Pāṇinīyas [vi, 2, 36], or after their subject of study, such as Vedic Kratus, Ukthas, and Sūtras [iv, 2, 59, 60].

The ordinary term for a teacher was Adhyāpaka. The specialist in Vedic recitation was called a *Srotriya* [v, 2, 84] and in Vedic discourse and interpretation (*pravachana*) a *Pravaktā*. One *Cha:una* might follow the system of recitation of another *Charana* [ii, 4, 3]. A teacher usually repeated the text five times. A pupil learning it from a single recitation was called an *Ekasandhagrāhī* [v, 1, 58]. Pupils were graded according to the number of mistakes they committed in such Vedic recitation, the limit allowed for such mistakes being fourteen [iv, 4, 63-6].

Girls were admitted to Vedic schools or *Charanas*. A *Kalhī* denoted the female student of the *Kalha* school. There were hostels for female students called *Chhātrī-śāla* [vi, 2, 86].

Each *Charana* had an inner circle of teachers and advanced scholars, which was called *Parishad*, whose decisions on doubts about readings and meanings of Vedic texts were binding on the *Charana*. The *Prātišākhya* literature was the product of these Parishads.

Economic Life : Occupations. Pāņini gives evidence of advanced economic life. He refers to the professions or unproductive occupations called Jānapadī Vritti [iv, 1, 42] depending on pay for livelihood [Vetanādibhyo jīva:i in iv, 4, 12], as in Government service. Men in service were called Adhyakshas and Yuktas [vi, 2, 66, 67]. There is mention of profession of arms [iv, 4, 14]. He also refers to labourers, karm:kāra, employed on wages, vritti [i, 3, 26] under stipulated terms, parikrayana [i, 4, 44]. Wages were paid both in cash and kind [ii, 2, 22].

Trade; Interest. There is mention of trade and commerce, Kraya-Vikraya [iv, 4, 13], and of the necessary moneylending [iv, 4, 31]. The rate of interest is stated to be 10 per cent, whereby ten rupees lent out were to return as eleven [*ib*. Kusīda-dašaikādašāt]. The debt was called after the mouth in which it was due for repayment [iv, 3, 47], e.g. $\bar{A}grahay\bar{a}nika$ [iv, 3, 50] or $S\bar{a}mvatsarika$ [ib.] and it could be repaid in kind, e.g. barley [iv, 3, 43].

Agriculture. As regards agriculture, the plough was called *hala* or *sīra* [iv, 3, 124]. Methods of ploughing and of sowing are indicated [v, 4, 58 19]. Crops were called after the name of the month in which they were sown [iv, 3, 44, 45], and fields after the name of the crop grown, e.g. fields of $vr\bar{i}hi$ (rice), *sāli*, *yava*, *shashtika*, *tila*, *māsha*, *umā* (linseed), *bhangā* (hempen flax), etc. [v, 2, 2-4]. There is also a reference to *unchhavritti*, picking up grains from the fields by ascetics [iv, 4, 32].

Arts and Crafts. A variety of arts and crafts is mentioned. Weaving is implied in the terms $gon\bar{i}$ (small sack for carrying grain), $\bar{a}v\bar{a}ya$, and $prav\bar{a}ni$ [v, 4, 160]. There is mention of cloth fresh from the loom—"tantrādachirāpahrite" (v, 2, 70]. $\bar{A}v\bar{a}ya$ is explained by Patañjali as the place where the weavers came and wove the cloth. Woollen cloth is mentioned $(\bar{u}rn\bar{a})$ [iv, 3, 158]. There was also dyeing with indigo $(n\bar{a}la)$ [iv, 1, 42], $l\bar{a}$ schā (shellac), and yellow ointment produced from potsherds and black mud $(gorochma\bar{a})$ [iv, 2, 2]. The potter was ca led kulāla [iv, 3, 118]. The leatherer was known [v, 1, 14, 15]. The fowler was called $S\bar{a}kunika$, and mention is made of hunting deer and fish [iv, 4, 35].

Music. Music was in vogue. There is mention of players on mridanga [iv, 4, 85], madduka and jharjhara [iv. 4, 56], and of concerts, $t\bar{u}ry\bar{\omega}iga$ [ii, 2, 2]; of vocalists, gāthakas, and dancers, nartakas [iii, 1, 145, 146].

Guilds. Craft: were organized in guilds, as indicated by a reference to a carpenter in the employ of the village community or working independently—"grāmakotābhyām takshnah" [v. 4, 95].

Excise. Excise was a source of revenue $\bar{a}yasth\bar{a}na$ [iv, 3, 75]. There are men'ioned brewery (*Sundikā*) [iv, 3, 76] and distillery (*āsutī*) [v, 2, 112].

Weights and Measures. Various weights and measures were known, such as $kh\bar{a}r\bar{i}$ [v, 1, 33], $p\bar{a}tra$ [v, 1, 40], vista (measure of length) [v, 1, 31], satamana [v, 1, 27], adhaka [v, 1, 53], *āchita* [iv, 1, 22], *purusha* (man's height for measuring a ditch) [v, 2, 38], *dishti* and *vitasti* [vi, 2, 31].

Coins. The following coins were known in Pānini's time: $k\bar{a}rsh\bar{a}pana$ [v, 1, 29], nishka [v, 1, 20, 30], pana [v, 1, 34], pāda, māsha [ib. v, 4, 1], and sāna (a small copper coin). There is mention of striking or stamping of coins [v, 2, 120].

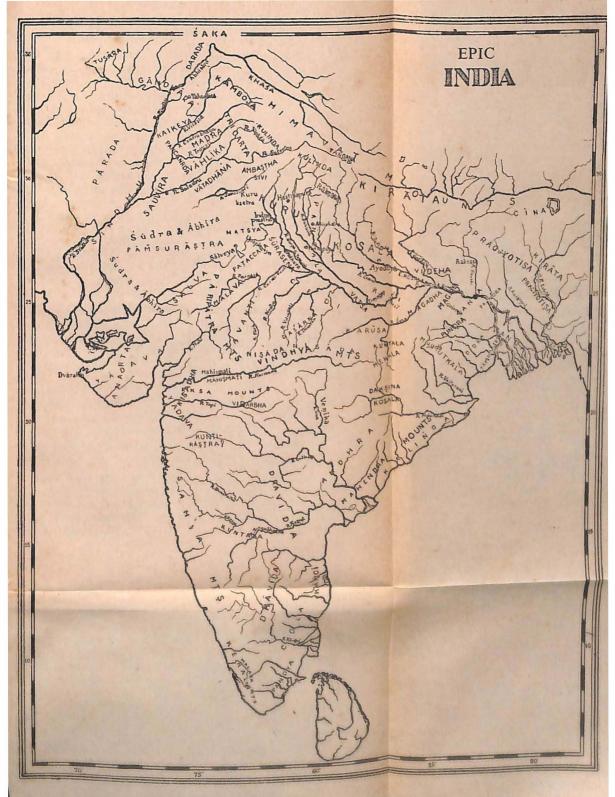
Corporations. The growth of group-life, popular government, and democratic institutions is evidenced in the variety of terms recorded by Pānini to indicate their different types. These terms may be explained as follows :---

1. Kula and Vamśa [ii, 1, 19]. Kula is the family which, continued for generations, counts as a Vamśa. But the Vamśa may be based on relationship in blood as well as learning (vidyā-yoni-sambandha).

Gotra liv 1, 162-51; which is a group based on re-2 lationship in blood and traced to a common ancestor after whom it is named. Thus the Vatsa gotra founded by Vatsa will comprise Vätsi, his son, Vätsya, his grandson, and Vātsvāyana, his great-grandson. Similarly, the term Sapinda includes six ancestors on the male side, together with their descendants up to the sixth degree. Panini mentions the names of many old and famous gotras such as Atri. Bhrigu. Angiras and the like, most of which became extinct. Sometimes, descendants became distinguished enough to found new gotras. e.g. Kapi and Bodha, who were descended from Angiras gotra [iv. 1, 107]. Some gotras might also derive from the mother where the father was unknown [iv, 1, 14], or from a famous member, like the Maukhari dynasty from Mukhara, in which case the gotra will be called gotravayava [iv, 1, 79].

3. Charana [iv, 3, 104]: it was a Vedic school for the study of the particular $\hat{s}\bar{a}kh\bar{a}$ or recension of the Vsda which was taught by the teacher who founded the Charana named after him. His disciples might also be the founders of new Charanas. Thus Vedavyāsa had his disciple Vaisampāyana who arranged the Yajurveda, and Vaisampāyana had disciples like Aruņi and Kalāpin who themselves founded new schools.

4. Singha, or Assembly, of which there were two classes, (a) Gana and (b) Nikāya [iii, 3, 42, 86].



The Nikāya was a religious association in which there were no distinctions due to birth (anauttarādharya-Samgha).

The Gana was the political assembly or Republic comprising all castes, and a special governing caste of Kshatrivas technically called Rajanyas consecrated to rulership [vi. 2, 34, and Kāsikā's g.css). Only Kshatriyas of the kujanya rank could be on the governing body of the Saingha or its Parlia-In the Sampha government, there were also parties ment. called Vargas [iv, 3, 64] named after their leader, e.g. Vāsudeva-Vargya, Arjuna-Vargya. There was rivalry for power, Dvanda [vi, 2, 34], or Vyuteramanam [viii, 1, 15], between the parties as in the Andhaka-Vrishni Sampha. Pānini refers to individual Samghas or Republics like Kshudraka, Mālava [iv. 2, 45] or Yaudheya [v. 3, 117] and also to Confederations of Republics, like the Trigarta Sampha of six republics [v. 3, 116], or the Andhaka-Vrishni Sameha [v, 3, 114], of which the federal executive was made up of the Rājanya leader of each constituent Republic with his own following or Varga: e.g. Sini and Vāsudeva, Svāphalka and Chait aka, or Akrūra and Vāsudeva, with their rival Vareas. The Kshudraka and Malava Samghas had also a federal army called the Kshudraka-Mālavīsenā [iv. 2. 45].

The Samgha as a Republic naturally comprised the whole population in all its castes admitted equally to its privileges. A Brahmin and a Kshatriya member would, however, be differently designated from a Sūdra member; e.g. a Kshaudraka would denote a Brahmin or a Kshatriya, and Kshaudrakya a Sūdra member of the Kshudraka (Greek Oxydrakai) Republic.

The expression *Chhandaso Nirmite*, "passed or made by the free will of members," indicates that the Saringha performed its business in accordance with the votes of its members [iv, 4, 93]. The Pāli term for vote is also *Chhanda*.

The term $P\bar{u}ga$ or Guild is sometimes [v, 3, 112] used in the sense of the village community under the Grāmanī. It was known for its corporate character or organization [v, 2, 52]. Pāņini also tells of Kumārapūgas which were like juvenile associations. Kingship. The king had his Council or Parishal, of which the members were called $P\bar{a}rishadyas$ [iv, 4, 44]. The Parishal strengthened the position of the king who was designated as Parishadvalah [v, 2, 112]. As regards government officers, the general term was Yukta [vi, 2, 66]. The head of a department was called Adhyaksha [vi, 2, 67]. The officer in charge of rules and discipline was called Vainayika; in charge of law, Vyāvahārika; in charge of ways and means or finance, Aupāyika [v, 4, 34].

Civilization as presented in the Dharma-Sūtras :1 Age. We shall now consider the Sūtras proper as sources of history. These are the Stauta, Grihva and Dharma Sutras, forming parts of the whole called Kalpa, but differentiated later into independent works. The metrical Sistras, for instance, were a development out of the Dharma Sūtras, with the part dealing with civil and criminal law increasing and their connection with the Veda loosening. The sacrificial Sutras, the Strauta works dealing with the greater sacrifices of Havis and Soma, are not so important for our purposes as the Grihva and Dharma Sūtras. The chief Sūtra works are those of Gautama. Baudhäyana, Vasishtha, and Apastamba named in the chronological order, though there is some doubt as to the priority of Vasishtha to Apastamba. They may be taken to belong to the period from the seventh to the second century B.C. and to represent the views of different Vedic schools and different regions from the Andhra country following Apastamba to the countries of the north-west following the school of Vasishtha.

Locality. The Sūtras appear, from their geographical references, to have been operative within very limited areas and select regions. Baudhāyana [i, 1, 2, 13-15] requires a purificatory sacrifice for a visit to Kalinga, to the countries of the Ārattas (in the Punjab), the Sauvīras (Multan), the Pund as and Vangas (in Bengal). He also condemns the peoples of Avanti (Malwa), Magadha (Bihar), Anga (western Bengal), and Surāshtra (southern Kathiawad) as of mixed origin and hence of doubtful customs. The country of the

References: Kane's History of Dharma-sästra Literature, Vol. 1; Chapter XII of Cambridge History, Vol. 1. Aryans narrows down to the area lying between Patiala¹ and Bihar² and between the Himālayas and the hills of Malwa,³ while an opinion is cited which confines Āryāvarta only to the tract between the Gangā and the Yamunā. Vasishtha, however, cites the other opinion which places Āryāvarta between the Himālayas and the Vindhyas and between the two oceans in east and west [i, 9].

Family Life : its Ceremonies. The Grihva Sūtras dealing with family, the home life, and domestic ceremonies of the individual, assign a subordinate place to *dharma* or social matter, the wider relations of the individual to the S ate, which form the main subject-matter of the Dharma Sūtras. Of political and social life, they convey but little information. except as confined within the bounds of the family. Thev present the whole duty of man as a householder from boyhood to burial, indicating the ceremony marking every important phase of his life. There are ceremonics prescribed before with. at birth, at the naming of the new born child, at his first feeding with solid food, when his hair is cut, at his initiation into studentship, and at his return home (samāvartana) from his preceptor to en'er upon the householder's life by marriage. Eight kinds of marriage are distinguished, viz. (1) Brahma (2) Prajapatya which forbids a second wife and change of āśrama, (3) Ārsha. (4) Daiva, (5) Gandharva or lovemarriage, (6) Asura or marriage determined by dowry, (7) Räkshasa or forcible marriage, and (8) Paiśācha. Of course. the first four are regarded as lawful and the last two disapproved.⁴ Every householder is enjoined to perform daily Pañcha-mahāyajñas, the five great sacrifices. (1) to Brahman in the form of study and teaching, (2) to the ancestors by

¹ East of the region where the Sarasvatī disappears [Vas., i. 8; Bau., i, 1, 2, 9].

2"Kālakavana," black-forest traced in Bihar.

⁸ Pāripātra hills.

⁴ In Brāhma marriage, the bride is offered out of free will; m Pājāpatya, the offer of marriage comes from the wooer; in Arsha, the bride's father receives a pair of kine as presents; in Daiva the bridegroom is a Ritvii, or sacrificial priest; the Gāndharva or love-marriage, when completed by formal ceremonies, ranks as tarpana (offering of food and water), (3) to the gods by the sacrifice of burnt oblation, (4) to the Bhūtas by the offering of bali, and (5) to fellowmen by the entertainment of guests. Next, there were prescribed seven $p\bar{a}kayaj\bar{n}as$ which were small periodical sacrifices, viz. Ashtakā (offered on the eighth day of dark fortnights of four months, Kārtika-Māgha), §rāvaņī (offered on the full-moon day of śrāvaņa), §grahāyaņī (offered on the full-moon day of śrāvaņa), Āgrahāyaņā (offered on the fourteenth or full-moon day of Āgrahayaņa), Chaitrī (for the full-moon day of Chaitra), Āsvayujī (on the full-moon day of Āsvina), Pārvaņa (on new and full-moon days) and ŝrāddha (the monthly funeral offering to the manes on the new-moon days).

Varna (Castes) and Aśrama. The social system is established on the basis of what is called Varnāśramadharma, the best definition of that vague and comprehensive complex known as Hinduism. The system rests on two factors. The first is caste, varna or jāti, "colour" and "kin". The purity of caste depended in marriage as well as freedom from defilement by eating and touching what is unclean. Its rules interdict intermarriage between different castes, and interdining. In the earlier Sūtras, these rules are not so strict. Gautama permits a Brahman to eat food given by any of the "reborn", i.e. the three higher castes, and, in case of distress, even the food given by a Sūdra [xvii, 1 f.]. But food is defiled from a police-officer (dandika), a miser, a jailer, or an enemy, Apastamba [i, 6, 18, 1 f.] does not allow a Brahman to eat in the house of any one of the three castes below him. In marriage, caste is not so important as family. The marriage rules permit the marriage of a Sūdra girl, though only as a fourth wife [Parāśara, GS., i, 4, 11], with a Brāhman whose

the best form of marriage, of which the classical example is that of Sakuntalā and Dushyanta; Asura marriage, through purchase of bride, was open only for Vaiśyas and Sūdras [Manu, iii, 24]. Aśvalāyana defines Paišācha as secret abduction, while $R\bar{a}kshasa$ is abduction effected by force and fighting. Both are descr.bed as marriage by capture and called $ksh\bar{a}tra-viv\bar{a}ha$, such as was practised by the Mahābhārata heroes like Duryodhara, Bhīma, or Arjuna. Allied to this is also Svayanivara, a romantic marriage by the bride's own choice of her husband. offspring, mixed, and not to rank as reborn (*dvija*), is nevertheless legally recognized.

But the rules of Aśrama were as vital to the Hindu social system as those of caste with its restrictions regarding marriage and food, on which an exaggerated emphasis is laid now. These rules require that an individual must pass through four states in succession, viz. those of the Brahmachari or initiated student, the householder or married state, the recluse (Vanaprastha), and the Sannyasi or hermit. The obligations of studentship were so paramount that a member of the three higher castes not accepting them would be an outcast. "No one should imitate such men, nor teach them, nor perform sacrifice for them, nor have intercourse with them," and their descendants descend to the status of Vrātvas [ib., ii, 5, 40 f.]. This shows that Hinduism insists on compulsory education for its three twice-born classes making up the bulk of the community, and that this education was not necessarily and normally elementary. It was compulsory higher education.

Different Castes and their duties. The duties of different Varnas and Astramas may be indicated.

The first three Castes have the following duties in common: (1) Adhyayana (study), (2) $Ijy\bar{a}$ (sacrifice); and (3) $D\bar{a}na$ (charity).

The duties special to $B\bar{r}ahmana$ are (1) Pravachana (teaching), (2) $Y\bar{a}j.ma$ (conducting sacrifice), and (3) Pratigraha (receiving gifts).

The duties special to Kshatriya are: (1) protection of all creatures (Sarva-bhūta-rakshanam), (2) righteous adminīstration (Nyāya-dandatvam), (3) support of learned Brāhmanas (Srotriyas), (4) support of non-Brāhmanas in distress, (5) support of non-Brāhmana ascetics (akara) and those who directly serve the public (upakurvānah) like physicians (or students, according to some), (6) preparedness for war (yog.ischavijaye), (7) march through the country (charyā= rāshtrasya sarvato atanam) with his army (rathadhanurbhyām), (8) firm stand to death in ba tle without retreating therefrom (samgrāme samsthānamanivri:tischa), (9) collection of prescribed taxes for defence of the realm (tadrakshana dharmitvāt). HC-7 The duties special to the Vaisya are: (1) Krishi (agriculture), (2) Vānijya (trade), (3) Pāsupālya (cattle-rearing); and (4) Kusīda (banking).

The duties special to the $S\bar{u}dras$ (described as $\epsilon kaj\bar{a}ti$, i.e. devoid of a second birth from Upanayana) are : (1) practice of truthfulness, humility, and purity, (2) bath without *āchamana mantra*, (3) $Sr\bar{a}ddhakarma$ (funeral rites), (4) Bh_itya-charanam (support of dependants, not allowed to slaves), (5) $Svad\bar{a}rav_itti$ (marrying in the same caste or always remaining in the householder's state), (6) service of higher castes (*paricharyā*) on wages (*vritti*), (7) practice of independent crafts (*Silpav_itti*) "like those of barber, washerman, painter, carpenter, or blacksmith".

There are a few provisions showing that the status of the Sūdra was not very degraded. For instance, his master must support him even when disabled ($ksh\bar{n}na$) for work, while he should also support his master in similar conditions. in which case the Sūdra's right to riches is recognized in aid of higher castes. The virtuous Sūdra could also utter Namaskāra Mantra and perform the Pākayajñas.

The Four Aśramas. The four Aśramas are those of (1) the Brahmachārī, (2) Grihastha, (3) Bhikshu, and (4) Vaikhānasa.

The Brahmachārī is marked by his living with his teacher (āchārya-kula-vasanam) and is of two classes: (a) Upakurvāņa and (b) Naishthika (permanent student).

The $G_{\bar{t}ihastha}$ has manifold duties broadly marked out as (a) $yaj\bar{n}a$, (b) adhyayana, and (c) $d\bar{a}na$, and has to release himself from three debts : debt to gods, by $yaj\bar{n}a$; to $pit_{\bar{t}is}$, or ancestors, by offspring; and to $\bar{t}ishis$ by observing continence on pavan days.

The last two stages of life are marked by tapas.

The *Bhikshu* (ascetic), must be (1) *Anichaya*¹ (devoid of store of articles): (2) $\overline{Urddhvarela}$ (continent); (3) confined to one place in the rains (*dhruvašilo varshāsu*), (4) going

¹ As he cannot own property, Vishnu [96, 1] prescribes a sacrifice (ishti) which he has to offer to Prajāpati by which his whole property is given away as sacrificial fee.

to a village only for begging, and *that* only after the villagers' meals are finished, or when there was no refusal, without giving them any blessings in return, and restraining speech, eyes and action; (5) should wear clothing $(kaup\bar{n}a)$ or old rag $(prah\bar{n}na)$ duly washed (nirnijya) to cover nakedness $(\bar{a}chchh\bar{a}dan\bar{a}rtham)$; (6) should not partake of fruits or leaves by plucking them and injuring plant-life; (7) should not, out of season (i.e. after rains) dwell for a second night in the same village, and (8) should not kill seeds to sustain his own life (e.g. pounding seeds like raw rice by a pestle) but should accept as alms only cooked food, in charity towards all $(samo bh\bar{u}teshu)$ and indifference to injury or gain.

The Vaikhanasa (hermit) is so called because he lives according to the rules promulgated by Vikhanas the sace 1 Bau. ii, 6, 14]. He should live in the forest (vane), subsisting on roots and fruits (and not cooked food), practising austerities (tapah śilah), tending and offering oblations to Fire every morning and evening, as prescribed in the Vaikhanasa Sastra called Srāmanaka. As to his fare of roots and fruits, these must be of the forest and not of the village (agrāmya-bhoji), and in distress he may eat the flesh of animals killed by others like tigers (baishkam). He should still perform the five Mainavainas (worship of gods, manes, men, goblins, and rishis). using for his oblations the wild roots, fruits, and leaves, and practise penances as an Audumbara, a Variñcha, or a Valakhilva as a sapalnika, i.e. when he is with his wife in the forest. or as Uddandaka, Unchhaviittika, or Panchagnimadhvaśavi, as an abatnika when he is not with his wife. He must not live on ploughed land, nor enter a village, nor store up food for a year. should allow his hairs to grow (jatila) and wear only bark and skin (chīrājina) [Gautama, iii and x, on Castes and Asramas].

It may be noted that while Gautama uses the term *Bhikshu*, and that for the third *āśrama*, Baudhīyana and Apastamba use instead the term *Parivrājaka*, and that for the fourth *āśrama*.

The use of the terms Bhikshu and Srāmanaka and the provision that the Bhikshu must not move about in rains are associated with Buddhism. Baudhāyana [ii, 6, 11] also refers to Srāmanaka and the hermit's rain-retreat (Pāli, vasso). He further refers to the use by the hermit or Vaikhānasa of cloth

for straining water, a characteristic of the Buddhist Bhikshu [ii, 6, 11, 24].

Baudhāyana recruits the Sannyāsī or Parivrājaka (a'so called in texts as Bhikshu, Yati, or Pravrajita) of the fourth \bar{A} sirama from Naishthikas, widowers, childle.s householders, and men above 70 years, with sons a'ready established in life. The childless householders are described as (a) $S\bar{a}linas$ (possessed of houses), (b) $Y\bar{a}y\bar{a}varas$ (those who are already vagrants), and (c) Chakracharas, those who go by turns to rich people for livelihood. [See ii, 10, 17].

Apaatamba mentions persons becoming ascetics without rules, meaning, according to the commentator, the Sakyas or Bauddhas [i, 18, 31].

He gives a fine description of the Samyāsī or Parivrājaka as one who "abandoning truth and falsehood, pleasure and pain, the Velas, this world and the next, seeks only the \bar{A} tman" [ii, 9, 21, 13].

But he refers to hermits being with or without wives [ii, 9, 22, 7], though living outside the village in each case.

Comparison of the four 'Dharma-Sūtras as to age, authority, and contents. As has been already indicated, the four typical Dharma-Sūtras, viz. those of Gautama, Baudhāyana, Apastamba, Vasishtha, may be taken to be ong to the period 600-300 B.C. As pointed out by Kumārila in his Tantra-Vārttika, Gautama was followed by the Sāmavedins, Baudhāvana and Apastamba by the Taittirivas and Vasishtha by the Rigvedins. Of these, Gautama was the oldest. He is quoted as an authority by Baudhāyana himself on the question of the authority of local usages [G. Dh. S., xi, 20]. Both hold that these cannot prevail against Vedic tradition and Smriti. The Manu-Smriti refers to Gautama as the son of Utathya [iii, 16]. Gautama mentions Yavana [iv, 17], but India had known of Yavanas (Ionians) since the time of Darius and Xerxes of sixth century B.C. and earlier.

As to literature known to these Sūtra writers, Gautama mentions the Vedic Samhitās and Brāhmaņas, Upanishads. [six, 13], Vedāngas [viiii, 5, xi, 19], Itihāsa [viii, 6,], Puraņa [*ib*], Upa-veda and Dharma Sūtra [xi, 19]. And he actually borrows from Sāmavidhāna-B:āhmaņa (ch. 26) and Taittirīya Āraņyaka (ch. 25). The reference of both Gautama and Baudhāvana to the Vaikhānasa Sāstra and to that called Sramanaka recalls Pānini's reference to Bhikshu-Sūtras liv. 3. 110-11. Baudhāyana borrows from Taittirīva-Samhitā, -Brāhmana, and -Āranvaka, as also from Satapatha Brāhmana, and mentions the jouowing authors on *Dharma*, viz. Aupaianghani ii. 2. 33], Kātya [i, 2. 47], Kāśyapa [i, 11. 20], Gautama [i, 1, 23], Prajāpati [ii, 4, 15], Manu [iv, 1, 14], Maudgalya [ii, 2, 61], and Harita [ii, 1, 50]. He also quotes a gatha of the Bhalavins [i, 1, 29] on the geographical limits of Aryavarta (from a Nidana work known to the Nirukta) and a prose passage from a work by Asura Kapila to whom is curiously ascribed the institution of the Ascamas [ii, 6, 30]. He also refers to the profession of an actor or a teacher of dramaturey (Nātyāchārya), but as an Upa-pātaka. Pāņini also has mentioned the Natasūtras [ib.]. Apastamba quotes the Brähmanas frequently and mentions the Vedängas as Chhandas. Kalpa. Vyākaraņa, Jyotisha, Nirukta, Sikshā and Chhandovichiti (metrics). He mentions the following writers on Dharma by name, viz. Eka, Kaņva, Kāņva, Kunika. Kutsa. Kautsa. Fushkara: ādi, Vārshyāyani, Švetaketu and Hārīta (i. 6. 19). He shows singular acquaintance with the Purva-Mimamsa of Jaimini, e.g. i, 1, 4, 8, on comparative value of Vedic text and Smriti = Jaimini i, 3, 3; i, 4, 12, $11 = J_{...}$ iv, 1, 2 (stating that where an action is done for the pleasure of it, it need not be deemed as being based on Sāstra); ii, 4, 8, $13 = I_{...}$ i. 3, 11-14. referring to the convention (samaya) of these versed in Nvava (i.e. Mīmāmaā) that the Angas cannot be designated as the Vedas: i. 4, 12, $9 = J_{.}$, xii, 3, 14, stating that anadhvava in Vedic study does not apply to recital of Mantras as sacrifices. Varishtha contains some new matter; e.g. rules of a loption (ch. 15), or documents as means of proof (ch. 16, 10 15), or interdicting the learning of the language of Mlechchhas [vi, 41].

There are also points of both agreement and difference between these doctors of law. A few of these may be cited. Gautama, Baudhāyana, and Vasishtha mention several secondary sons, on whom Apa tamba is silent. Gautama, Baudhāyana [ii, 2, 17, 62] and Vasishtha approve of Niyoga, which Apastamba condemns [ii, 6, 13, 1-9]. Gautama and Baudhāyana [i, 11, 1] speak of eight forms of marriage which are limited to six by Apastamba who omits Prājāpatya and

Paiśācha [ii, 5, 11, 17-20]. Baudhāyana (ii, 2, 4-6] allows a larger share to the eldest son in partition, while Apastamba condemns this procedure [ii, 6, 14, 10-14]. Baudhāyana allows Upanayana to the *tathakāra* [Gr. S., ii, 4, 6], but not Apastamba [i, 1, 1, 19]. Apastamba is also silent on the mixed castes, of which long lists are given by both Gautama and Baudhāvana. The injunctions about usury are interesting in their difference. Gautama allows it to a Brahmana as a calling if it is done through an agent [x, 6], together with agriculture and trade. "These rules which thus allow Brahmanas to be gentlemen farmers and sleeping partners in mercantile or banking firms managed by Vaisyas do not occur in other Smrit's" (Buhler, SBE., ii, p. 228, n.]. Apastamba prescribes a penance against usury and forbids eating at the usurer's house [i, 9, 27, 10; 6, 18, 22]. Baudhāvana likens it to Brahmahalvā and treats a Brahmana usurer as a Sūdra. But he allows the first two castes to practise usury towards atheists. Sudras, and suchlike persons [i, 5, 79-81].

Baudhāyapa is supposed to belong to the south. He condemns the northern custom of sea-faring as a sin only less than a mortal one [ii, 1, 41]. But at the same time, he condemns Dakshināpatha as the home of mixed castes. If he was a southerner we must find him a place by restricting the denotation of the term Dakshināpatha. Āpastamba is also regarded as a southerner from his special mention of a Śrāddha usage peculiar to the Udīchyas, northerners [ii, 17, 17]. Haradatta quotes a verse which defines Udīchya as the region to the north of the Śarāvatī, while the *Charana-Vyūha* commentary cites *Mahārnava*, locating the Āpastambīyas to the south of the Narmadā towards south-east, i.e. the Andhra country and the region about the mouth of the Godāvarī.

There are two interesting passages in Apastamba and Baudhāyana bearing on learning and education. Apastamba regards the knowledge which exists traditionally among wemen and Śūdras as the farthest limit of Vidyā and is stated to be a supplement of the 'Atharvaveda. Here is probably a reference to the Arthaśāstra which, according to the Charana-Vyūha, constituted an Upaveda of the Atharvaveda. The other passage is from Baudhāyana Grihya-Sūtra [i, 7, 2-8], specifying the following grades among learned men or Brāhmaņas : (1) Brāhmaņa who, after Upanayana and practice of vows of brahmacharya, has studied a little of the Veda; (2) Srotriya who has studied one Vedic sākhā; (3) Anūchāna who has studied the Angas; (4) Rishikalpa who has studied the Kalpas; (5) Bhrūna who has studied Sūtra and Pravachana; (6) Rishi who has studied all the four Vedas; (7) Deva who has achieved more progress.

It may also be noted that the Sūtras contemplate non-Brahmin teachers (*Ga.*, vii, 1-3; *Bau.*, i, 3, 41-3; \overline{Ap} , ii, 4, 25-7].

The Dharma Sūtras are a record of social customs and usages and the civil and criminal law based on them. The customs and usages were not uniform all over India. There was a marked difference between the north and the south of India, with the river Narmadā as the dividing line. For instance, the custom peculiar to the south, which is noticed by Baudhāyana [DS., i, 17 f.] and persists to this day, is marrying the daughter of a maternal uncle or of a paternal aunt, while the peculiar customs of the north which would be sinful in the south were "to follow the trade of arms, to deal in wool, and to go to sea". According to Baudhāyana [ii, 1, 2, 2], "making voyages to sea" would cause loss of caste.

As regards law, its source was not the Sovereign Law who, as the executive or Danda, was to uphold and to enforce it. According to Gautama [xi, 19], "the administration of justice (dharma) shall be regulated by the Veda, the Dharma-Sastras, the Vedangas, the Puranas, and the Upavedas," The different groups and communities were left to legislate for themselves. "The king's duty is to pay attention to the special laws of regions (*ianapada*), castes (*jāti*) and clans (*kula*), and keep the four orders (varhas, castes in general sense) to their prescribed duties" [Vasishtha, xix, 1-24]. Again, "the king must protect the castes (*varnas*) and different stages of life (āśramas)...Authoritative in the realm shall be all laws of castes (*jāti*) and clans (kula) as well as the laws of regions (ianabada) not opposed to Vedic tradition, while, for their respective orders (varga), ploughmen, traders, hordsmen, money-lenders, and artisans may make their own laws" [Gautama, xi, 21]. This passage shows the self-government enjoyed by the economic groups or guilds into which agriculture.

industry, trade, and banking had organized themselves. Vasishtha, in an interesting passage, states how in cases of conflicting *evidence of documents*, reliance was to be placed on the Guilds and Corporations of the neighbourhood (Sreni) [xvi, 15].

Civil Law is discussed in the Sūtras under the head of royal duties and the chief subjects of Civil Law in the restricted scope of royal duties were only Taxes and Inheritance. According to Gautama, the king could take one-tenth, one-eighth, or one-sixth of the produce, one day's work per month from attisans, one-twentieth on merchandise, one-fiftieth on cattle and go'd, and one-sixtieth on roots, fruits, flowers, herbs, honcy, meat, grass, and firewood [xi, 1 f.: x, 25 f.].

Inheritance is not yet regulated by any general state law. It is discussed in connection with marriage, which was not permitted within the same gotra (gens, family) or within six degrees on the mother's side. Then the rules of inheritance mark out the Sapindas who were relations within six degrees as the heirs in p'ace of sons. The Sapindas can be only males. The widow is excluded from inheritance and the daughter, according to Apastamba, inherits only in default of sons, teacher or pupil. The king inherits in default of the others named and an opinion is cited that among the sons only the e'dest inherits. Baudhāyana states that Sapindas inherit in default of nearer relations and Sakulyas (remoter relations) in default of Sapindas, and that the e'dest son may receive the best chattel or the father may divide his property equally among his sons.

The status of women is indicated. Women on their own account could not offer the Vedic Srauta or the Grihya sacrifices. They were not independent either in respect of sacrifice or of inheritance [Baudh., ii, 2, 3, 44; Gautama, xviii, 1]. Suttee is not known. Vasishtha counts women as property [xvi, 18].

In Criminal Law, the chief crimes treated are arsault, adultery, and theft. A Sūdra committing homicide, theft, or stealing land will suffer confiscation of his property and capital punishment [Apastamba, DS., ii, 27, 16]; but a Brāhmana priest shall be blinded for same crimes [*ib.*, 17]. A Kshatriya abusing a Brāhmana is fined 100 coins and a Vaisya 150 coins but a Brāhmana abusing a Kshatriya will pay only 50 coins, and abusing a Vaiśya, only 25 coins (*Karshapanas*), and will get off scot-free for abusing a Sūdra [Gautama, xii, 8 f.].

Caste has influenced also matters outside of criminal law. e.g. rate of interest. This is stated to be five mashas a month on twenty Karshapanas [Gautama, xii, 29; Baudh., i. 5, 10. 221, which is equivalent to 15 per cent per annum, but according to Vasishtha [ii, 48], "two, three, four, five in the hundred, is declared in the Smriti to be the monthly interest according to caste," the rate being the less, the higher the caste. Usury, on the other hand, is permitted to the Vaisya but not to a Brahmana or a Kshatriva [ib., ii, 40; Baudh. i, 5, 10, 21]. These restrictions of caste were, however, relaxed in case of extreme distress, when lower occupations were permitted to higher castes for the sake of livelihood, such as trade and agriculture for a Brähmana or Kshatriya [Vas., ii, 24 f.], allowed as apaddharma. though if they persisted in such occupations, they would lose their rank [*ib.*, iii, 3].

The life depicted in the Sūtras is the life of villages and not of cities, which are despised. Apastamba [DS., i. 32, 21] tays : "Let him avoid going into towns." Baudhiyana [DS., ii. 3. 6. 33] goes further : "It is impossible for one to attain salvation, who lives in a town covered with dust." Similarly, the ceremonics prescribed for ploughing, with sacrifices to Asani (thunde: bolt), Silā (furrow) and other bucolic deities 1 ke Aradā. Anaghā, etc., or to Parjanya, Indra, and Bhaga, and for "furrow-sacrifice" and "threshing-floor sacrifice", point to the life of the agricultural villager [Gcbhila, GS., iv, 4, 28 f., 30 f.l. There are, again, constant injunctions to "go cut of the village" to sacr fice at a place where four toads meet, or on a hill etc., which imply life rather in villages even for householders than in towns [ib., jii 5, 32-5]. That is why the only architecfure allowed in the Sūtras is that of a public gaming-hall or gambling place provided by the king, but it had a thatched roof because holes could be made in it.

Nor are conditions much changed in the other Dharma Sūtras. Gautama expressly forbids recitation of holy texts at any time in a town. He presents to us the king hitting a thief with a cudgel [xii, 43], and he is supported by Apastamba [DS., i, 25, 4], who says. "A thief shall loosen his hair and appear before the king carrying a cudgel on his shoulder. With that cudgel the king shall smite him." Does this not indicate a small place and a petty king, a direct government and not that by agents?

Another passage in Apastamba [ii, 10, 25], however. shows a higher political development. It states that the king is to build a town (*pura*), and a palace equipped with a hall for guests, and an assembly-house (*sabhā*), furnished with a gaming-table. There were also houses kept by the king's servants, where took place assaults-at-arms, dancing, singing, concerts, etc. The king should appoint Aryas of good character to guard the people in villages and towns with their own staff. They were to guard a town from thieves for a league (*yojana*) in every direction and villages for two miles (a *kos* or quarter of a league). They were to pay back what is stolen within that jurisdiction and collect taxes for the king. This points to both urban and rural life and a larger kingship.

The general outlook of life became limited under injunctions forbidding sea-voyages, visits to forcign places, or the learning of a language spoken by barbarians [Vas., vi, 41; \bar{A} pastamba, i, 32, 18].

Civilization of the Epics. The two Epics, $R\bar{a}m\bar{a}yana$ and $Mah\bar{a}bh\bar{a}rata$, in their present literary form, are of the age of the $S\bar{u}tras$, though their subject-matter is much older.

Age. The geographical horizon of the $R\bar{a}m\bar{a}yana$ shows it to be older than the $Mah\bar{a}bh\bar{a}rata$. It does not extend far beyond the Vindhyas and substitutes $Dandak\bar{a}ranya$ for the Deccan, while the $Mah\bar{a}bh\bar{a}rata$ is acquainted with all parts of India and its division into numerous States which were flourishing seats of Aryan civilization.

As a literary composition, the Epic is made up of three elements: Story, Genealogy, and Instruction, each of which may be traced to remote origins; to the *Rigveda*, which contains stories in verse on Urvasī, Yama and Yamī, Sūryā and Gambler [x, 91; 10; 85; 34, etc.]; to the *Brāhmaņas* like the *Aitareya*, which gives the story of Harischandra in epic fullness; to the later *Gāthās* (strophes) which were laudatory memorial verses in honour of great men, and *Nārāšamsīs* or "hero-lauds"; while genealogy derives from the Deva-Janavidyā (knowledge of the god's-race) of the Upanishads. The epics are also the literary descendants of Itihāsa (story) and Purāņa (legend) mentioned in the Atharvaveda, Brāhmaņas and Upanishads. Through Parāśara, the promulgator of the Mahābhārata, the cpic bacomes connected with the White Yajurveda in which that name figures prominently. Again Janamejaya is mentioned in both Mahābhārata and Salapatha Brāhmaņa which the Mahābhārata acknowledges as the greatest of Brāhmaņa works.

But there are allusions in other earlier works to epic characters, which only show the epic in its present form to be later Thus the *Taittiriya Āranyaka* mentions both Vyāsa and Vaišampāyana, but not as authors or editors of the epic. Fānini mentions the word *Mahābhārata*, not in the sense of the epic, but only as an adjective, denoting something great about the Bharatas [vi, 2 38]. He, however, mentions Vāsudeva, Arjuna, and Yudhishthira but the first two as gods.

It is also to be noted that the Pāndus, whose feud with the Kurus forms the chief subject of the *Mahābhārata*, are not known to comparatively recent works like the *Brāhmanas*.

The great Mahābhārata teachers, Sumanta, Jaimini, Vaišampāyana, and Paila are, however, mentioned in the sāikhāyana Gjihya Sūtra.

The Mahābhārata in its present form seems to have been well established at the time of Fatañja'i's Mahābhāshva, second century B.C. That was also the time of the foreign invaders of India, the Yavanas, Sakas, and Pahlavas, who are mentioned in the epic. The fact is that the contents of the Epic were growing with additions and interpolations. The Grihya-Sūtra of Āśvalāyana mentions both a Mahābhārata and a Bhārata (its abridged form).

History. The theme of the $R\bar{a}m\bar{a}yana$ is in essence that of the conflict between Rāma and Rāvana, who may be taken to be the representatives and embodiments respectively of the Āryan and non-Āryan civilization. The conflict ends with the victory, after a long and arduous struggle, of the Āryan over the non-Āryan who was difficult to deleat owing to the strength of his organization and the resources of a highly developed material civilization with its centre in distant

Ceylon under its king, Rāvana. Rāvana is also described as an unequalled devotee of Siva and deriving from that devotion considerable spiritual and superhuman powers. On the other hand. Rama was the incarnation of Vishnu and of spiritual strength. Behind him were the real leaders, the two Brahmana sages. Vasishtha and Viśvamitra. who had planned the conflict and brought into it Rāma as the appended instrument to serve the Arvan cause. Rama was aided in his struggle by monkey-leaders and their following, and if these stand for non-Arvan peoples, it only shows the growing hold of the \bar{A}_{Γ} van over the non- \bar{A}_{Γ} van. The $R\bar{a}m\bar{a}yana$ thus ultimately tells of the extension of Arvan civilization to the south as far as Lanka or Cevlon. But popularly it is appreciated not for its supposed history but as a picture of perfect characters, the ideal father, son, brother, wife, husband, friend or devotee, appealing to millions of Hindus to this day.

The theme of the Mahabhārata is also a contuct, not between the Aryan and the non-Aryan, but among the Aryan peoples themselves, and involving not a part but the whole of India. The central fact of the conflict in the two epics is the same, an abuse of hospitality and abduction of the heroine. Sītā in the Rāmāyana, and Krishnā (Draupadī) in the Mahā-The Kurukshetra war of the Mahabharata affected bhārata. all the Arvan kings of India who ranged themselves on both sides, Kuru or Pandava. The Fandavas and their allies were of Madhyadeśa and Pańchāla, such as Kāśi, Kosala, Magadha, Mat va. Chedi, and the Yadus of Mathura, while the allies of the Kurus comprised the King of Pragivotish, the Chinas and Kirātas of north-east, the Kambojas, Yavanas, Sakas, Madras, Kaikevas, Sindhus, and Sauviras in the north-west, the Bhojas in the west, the King of Dakshinapatha in the south, the Andhras in the south-east, and the Kings of Mähishmatī and Avanti in Madhvadeśa.

Settlements. The basis of civilization is settled life of which the centres in an ascending series are called (a) Ghosha, or cattle-ranch, sometimes called vraja; (b) Pallī, a small barbarian settlement [pa.lighoshāh in Mbh., xii, 326, 20]; (c) Durga (101t) to protect the settlements; (d) Grima, growing round the durga as its nucleus; (e) Kharvala and Pattana, town; and (f) Nagara, or city. The city had special defences, battlemonted towers, and seven moats, and was laid out in squares. Its streets were well-watered and lighted with lamps [iii, 284, 3; xv, 5, 16, etc.]. The *Rāmāyana* mentions four [ii, 48, 19] and the *Mahābhārata* six squares. The city included the king's palace, the court of justice, the public gaming-hall, the hall for music and wresting contests. Beyond the city proper or inner city lay the booths for traders and the like, the unpretentious houses, and the pleasure-gardens [*Mbh.*, iv, 22, etc.]. The walls of the epic city had usually four gates, but Lankā had eight [*R.*, vi, 93].

Polity and Administration. The administration was planned on what may be called the decimal system. The unit was the grāma under its head-man, Grāmani, who had to protect it up to a distance of one krośa (about 2 miles) in different directions. Above him in order were the Daśagrāmī, the Vinisatipa and Satagrāmī, also called Grāmasatādhyaksha, the lords of 10, 20 and 100 villages, and all under the general governor, Adhipati, the lord of 1,000 villages. In this gradually extending circle, these several authorities received revenue, the returns of crimes, and passed them on from one to the next higher, till revenues and reports focussed in the king, the lord of all [cf. Manu., vii, 115-125; Yājñavalkya, i, 321; Ap., ii, 10, 26, 4 ff.].

The King. The king was no autocrat. He had to rule by right and morality. A wicked king was deposed. A king injuring his people was killed "like a mad dog". A "defective" king must lose his throne [*Mbh.*, v, 149, 25]. He was regularly consecrated and crowned as lord of the earth [*ib.*, xii, 40; *R.* ii, 69].

Corporations. He had to respect the laws of different regions (*Janapada*) and groups, such as *Kula* (clan), *Jati* (caste), *Stenā* (guild) or $P\bar{u}aa$ (village community).

Republics. The *Mahābhārata* (*Sāntiparva*) speaks of the republican form of government called *Gana* (sovereignty of the many) as prevailing at that time and of confederations of republics (*Sanghāta-gaņa*).

The Mahābhā) ta [xii, 81] mentions five republican peoples, the Andhakas, Vrishnis, Yādavas, Kukuras, and Bhojas, who had formed thems lives into a Confederation (Samgha) under Krishna as the federal president, Samgha-

mukhva, upon whom depended their common weal. Each of the constituent States of the Confederation was, however, an autonomous unit under its own chief called *isvara*. Thus the Bhojas were led by Akrūra. Akrūra's following included Baladeva (ib., 3037). Ahuka was the chief of another people of the same name, though he was himself a Yadaya (v. 86. 30411. The Ahukas were allies of Krishna [iii, 51, 1994]. Something like the Party System seems to have been in operation in this federal government. There was a struggle for power among the party-leaders. Those mentioned in this connection are Ahuka, Akrūra, Gada, Pradyumna, Samkarshana-Baladeva and Babhru-Ugrasena. All followed the leadership of Krishna except Babhru who organized opposition to him [xii, 81, 3040]. Krishna also had sometimes to complain about the lovalty of his own following. He complains to Narada that Samkarshana with his strength, Gada with his virtues, Pradvumna with his attractive presence, are leaving him helpless (asahaya), while all power is grasped by Ahuka and Akrūra, leaving him unsupported against Babhru. Nārada, however, advises Krishna to rise to the responsibilities of his position as the president of the whole Federation and save the Samgha from the internal (*ābhayantara*) dangers of disunion (*bhcda*) to which republics succumb [xii, 81].

While Saingha was the term for a confederation of republics, Gana was the term for an individual republic. A Gana, to thrive, must avoid bheda, keep its State secrets in the custody of its Cabinet (mantraguptih pradhāneshu), be governed by a council of leaders (Gana-mukhyas) and its wise mean (fnaaa-vriddhas), follow the Sistras and established laws and customs (vyavahāra), avoid nepotism and make recruitment to public service on the basis of merit (vinaya), and nip in the bud all internal dissensions. These start from the sphere of the Kula and, neglected by its elders, the Kula-vriddhas, spread to the Gotra and ultimately involve the whole Gana in ruin [xii, 107].

Checks to Absolutism. The checks to the king's autocracy came from bedies like the *Mantri-parishad* and $Sabh\bar{x}$, the Council and the Assembly. A Farishad or Cabinet of nine is formed out of a ministry of thirty-even, comprising four Brāhmaņas, eight Kshatriyas, twenty-one Vaiśyas, three Sūdras, and one Sūta [*Mbh.*, 85, 6-11]. The Prime Minister was called the Mantrī [xii, 69, 52]. The king's first duty every day was to visit the *Mantra-griha*, the council-hall, for consultation with his ministers individually or collectively [ii, 5, 43]. The President of the Assembly called *Sabhādhyaksha* was one of the eighteen chief officers of the State [ii, 5, 38]. The Sabhā is regarded as a judicial assembly in the passage : "that is no *Sabhā* where there are no elders; those are not elders who do not declare the law" [v, 35, 38]. A judge is called *Sabhāstāra* [iv, 1, 24].

Epic royalty is intimately associated with an aristocracy comprising the king's allies and relations, subject kings, military leaders or knights (called Suras) and priests. These nobles took part in council, conducted the assemblies, led the army. and were the king's Viceregents in all military affairs. The king was the chief of them for his qualifications for which he was really chosen, and not by virtue of heredity. His superiority lay in valour (vīrya-śreshthāścha rājānah in Mbh., i. 136. 19). It is further stated that "these three produce kings : an aristocrat (satkulina), a hero (sūra), and he that leads forward an army (senām prakarshali)" |xii, 75, 22 ff.]. These varicus classes of nobles are called (1) Mantrins or Cabinet Councillors: (2) Amatyas, the general officers, eight of whom might form the king's Cabinet, viz. one charioteer, three slaves and four priests [i, 149, 2, ff]; (3) Sachivas (comites) who were mainly military officials of the highest rank and were left in charge of the king's duties in his absence [i, 49, 23]; (4) Parishadas. or assembly men, who also guarded the reaim in the king's absence [v. 38, 14-20]; (5) Sahāyas, helpers of the king, who were high ministers [xii, 83, 22; 57, 22]; (6) Arthakārins. or executive officers in charge of State business, who were generally five in number in the Cabinet [ib.]; and (7) Dhārmikas. or Judges [xii, 121, 46; R., vi, 3, 13]. It is to be noted that in the absence of a definition of the functions attaching to these different titles of ministers, it is difficult to differentiate their different values.

Lastly, we may note that the Epics distinguish eighteen chief officers of the State as heads of departments called *Tirthas* [ii, 5, 38; R, ii, 109, 45]. These are: (1) *Mantri*

(Chief Councillor), (2) Purohita (Chief Priest), (3) Yuvarāja (Crown Prince), (4) Chamūpati (Commander-in-chief of the army), (5) Dvārapāla (Chamberlain), (6) Antarvešika (Overseer of the harem), (7) Kārāgārādhikārī (Overseer of prisons), (8) Dravyasanichaya-krit (Chief Steward), (9) Chief Executive Officer to finally determine what ought or what ought not to be done in public business (Krityākrityeshu chārthānāni Viniyojakah), (10) Pradeshtā (Chief Judge), (11) Nagarādhyaksha (City Prefect), (12) Kāryanirmāna-krit (Chief engineer), (13) Dharmādhyaksha (Superintendent of Justice). (14) Sabhādhyaksha (President of the Asiembly), (15) Dandapāla (Chief Criminal Judge), (16) Durgapāla (Warden of Forts), (17) Rāshtrāntapālaka (Warden of the Marches), and (18) Atavīpālaka (Chief Conservator of Forests).¹

Indian History according to Indian Tradition: The Puranas. The Puranas, as a class of literature, resemble the Epics and Law Books very closely in both form and substance, being written in the same style of Sanskrit and of verse. Sometimes they have even long passages in common. In their normal form, they should treat of the following five set topics, namely (1) Sorga, creation; (2) Prati-Sarga, recreation a ter Pralaya, i.e. the periodical dissolution of the universe; (3) Vanisa, genealog es of gods and Rishis or teachers; (4) Manvantara, the groups of "great ages" (Mahāyuga) included in a Kalpa or agon; and (5) Vanisānucharita, the history of the royal dynastics ruling during the four ages (yuga), making up one "great age". This ideal scheme is not, however, fully followed in the extant Puranas. The historical material of the Puranas is confined to the topic No. (5), but is found only in seven out of the eighteen extant Puranas, so that as many as eleven are devoid of any historical value. The Puranas are supposed to be narrated by the Suta (Chronicler) named Lomaharshana, or his son, the Sauti, Ugraśravas. This indicates that the traditional lore upon which the Puranas are based was not in the keeping of Brahmins. The Vayu Purana [i, 1, 26-8] expressly states that the Sūta was born to sing the

¹ I am indebted to the comprehensive article of E. W. Hopkins on the subject in the JAOS, Vol. xiii.

praises of the princes, the custodian of legends and traditions having no concern with the Vedas. Yet the Puranas eventually became considerably Brahmanized and utilized for religious purposes. Their underlying ethical purpose has been thus emphasized : "He who has heard of the races of the Sun and Moon, Ikshväku, Jahnu, Mändhätri, Sagara, and Raghu, who have all perished; of Yayati, Nahusha, and their posterity, who are no more; of kings of great might, resistless valour and unbounded wealth, who have been overcome by the still more powerful Time and are now only a tale; he will learn wisdom, and forbear to call either children, or wife, or house, or lands, or wealth, his own" [Vishnu Purana, trans, Wilson, iv 240]. The history of kings is thus introduced only to illustrate the vanity of human wishes. Accordingly, there has been a large intrusion of the religious element in praise of the great gods of Hinduism. Siva or Vishnu, so that the Puranas now practically rank as scriptures of later Hinduism, just as the Vedas are of the older Brähmanism. Only they lack the sanctity and purity of the Vedic text and its consequent freedom from internolations.

The conception of the Purāna is as old as the Upanishads in which the Itihāsa-Purāna already figures as a recognized subject of study, and is further designated as the fifth Veda, the Veda of the laity, along with the Epics.

Of all the Puranas, the Vishnu Purana appears to be the best preserved. Their differences are due to local touches. For instance, an Orissa stamp may be detected in the Brahma Purana, while the Padma is associated with Pushkara, Agni with Gayā, Varāha with Mathurā, Vāmana with Thanesar, Kūrma with Benares, and the Matsya with the Brāhmins on the Narmadā. The earliest reference to an existing Purāua is contained in the Dharma Sūtra of Apas amba [ii, 9, 24, 6] of about the second century B.C. citing the Bhavishya Purāna which may thus be taken to date from earlier times, about fifth century B.C. [Pargiter's Ancient Indian Historical Tradition, pp. 44-54].

Geographical Background. The Purāņas give some precise geographical data. India called Bhāratavarsha is defined as the country that lies north of the ocean and south of the snowy mountains, and is so called because it is the abode HC--8

of the descendants of the Bharatas. It is known for its seven main chains of mountains, called Mahendra, Malaya, Sahya, Śuktimat, Riksha, Vindhya, and Pāripātra. It is also stated that on the east of Bhārata dwell the Kirātas (the barbarians), on the west, the Yavanas, and in the centre, the Āryans classified into Brāhmaņas, Kshatriyas, Vaiśyas, and Šūdras [*Vishnu Purāma*, Wilson's trans., ii, 127-9]. There are also detailed lists given of the various rivers rising from the Himalayas and the seven great ranges, and of peoples belonging to different regions. Some of this material has been changed from time to time to bring it up to date. Thus there is mention of Yavanas, Śakas, and Pahlavas who came to India in the first and second century B.C., and also of the Hūņas who overran the Gupta Empire in the sixth century A.D.

History up to Mahābhārata War. The Purānas set up a primeval king named Manu Vaivasvata from whom are derived all the dynasties that ruled in India. He had a daughter, Ilā, of whom was born Purūravas Aila, who started ruling at Pratishthāna (modern Allahabad), the original Indian settlement.

Another son of Manu, Ikshvāku, set up in Madhyadeśa, with his capital at Ayodhyā.

Ikshväku's son, Nimi, set up in Videha, and his son Dandaka in the forest named after him in the Deccan.

A son of Manu by different origin, Saudyumna by name, set up at Gayā and eastern districts.

A son of Purūravas, Amāvasu, founded Kānyakubja, and a grandson founded Kāšī.

Aila imperialism soon established itself under Ikshväku's descendant, Yayāti, whose five sons are called Yadu, Turvasu, Druhyu, Anu, and Pūru, all of Rigvedic fame, and thus linking up the traditions of the Vedas and the Purāņas. The five sons divided between themselves the whole of mid-north India, along with the earlier Aila kingdoms of KTsi and Kānvakubia. Püru got the ancestra' sovereignty of the middle region, the southern half of the Ganges-Jumna doab, with its capital at Pratish(hāna. Yadu got the south-west, the region watered by the Rivers Charmanvatī (Chambal), Vetravatī (Betwa) and Suktimatī (Ken). Druhyu planted himself in the west, in the country west of the Jumna and north of the Chambal; Anu in the north, i.e. the northern portion of the Ganges-Jumna plain; and Turvasu in the south-east, round Rewa.

The chief development took place among Yadu's descendants who increased and divided into two great branches, the Haihayas and the Yādavas, occupying the northern and southern parts of Yadu's territory.

The Yādavas forged ahead under Sasabindu who conquered the territories of the Pauravas and the Druhyus.

Yādava imperialism was rivalled by that of Ayodhyā under Māndhātā overrunning Kānyakubja, Paurava realm, and the Druhyus whose king, Gāndhāra, was driven to Gāndhöra country named after him. His son, Muchukunda, established himself at Māhishmatī (modern Māndhātā) and Purikā on the Narmadā.

Next followed great movements among the Haihayas, Anavas, and Druhyus, as reactions to Māndhātri's conquests. The Anavas divided into two branches. The one under Uśinara spread through the Punjab, creating the Yaudheyas, Ambashthas, Świs, Madras, Kekayas, and Sauvīras, pushing the Druhyus to Gāndhāra and the Mlechchha countries beyond. The Anava branch under Titikshu moved eastward beyord Videha and Vaišālī, founding the five kingdoms of Anga, Vanga. Pundra, Suhma, and Kalinga under King Bali.

Haihaya imperialism now intervened with the conquests of Kārtavīrya-Arjuna, which drove the Bhārgava Brāhmaņas from their settlement on the Narmadā to seek alliance with the Kshatriyas of Kānyakubja and Ayodhyā. The fruit of this fateful alliance was Jamadagni whose son Paraśu-Rāma destroyed Haihaya power under Tālajangha, but only for a time.

The Tālajanghas in five branches—Vītahotras, Sāryātas, Bhojas, Avantis, and Tundikeras—established their dominion all over northern India, overthrowing Kānyakubja, and Ayodhyā, with the help of the Sakas, Yavanas, Kāmbojas, Pāradas, and Pahlavas from the north-west and extending their conquests up to Videha and Vaišālī.

Ayodhyā revived under Sagara whose conquests established his empire over northern India, destroying Haihaya domination. The kingdoms that survived these cataclysms were Videha, Vaišālī, Anava kingdoms in the east, Kāšī in Madhyadeša, Turvasu's line in Rewa, and the new Yādava kingdom of Vidarbha.

The old Paurava kingdom also revived after Sagara's death under Dushyanta, and his son Bharata, but in a new region, the north portion of the Ganges-Jumna doab, with its capital at Hastināpur replacing the old Pratishthäna. There was a great expansion of the Bhāratas in new kingdoms formed, such as Krivi or Pañchāla in two parts, northern called Ahichchhatra, and southern, Kāmpilya.

Ayodhyā had another spell of power under a succession of able kings like Bhagīratha, Dilīpa, Raghu, Aja, and Dašaratha, by whose time it was known as Kosala.

The Yādavas also rose to power under King Madhu and the Mādhavas whose territory extended from Gujarat to the Yamunā.

This disposition of powers at the time of Dasaratha agrees with that presented in the Rāmāyana. It shows Ayodhyā or Kosala on friendly terms with the castern states like Videha, Anga, and Magadha, and the Punjab states of Kekaya, Sindhu, Sauvīra, the western state of Surāshtra and the Dākshinātya states.

Ayodhyā, after Rāma, recedes into background. The next period shows the Yādavas and the Pauravas as the chief actors.

The Yādavas were represented in four kingdoms, the chief of which were those of Andhaka and Vrishni. Andhaka reigned at Mathurā, succeeded by his son Kukura whose descendants, the Kukuras, ruled there up to Kamsa. Vrishni reigned at Dvārakā in Gujarat up to Akrūra, his descendant.

Other Yādava kingdoms at the time were Vidarbha, Avanti, Dašārna and a Haihaya kingdom at Māhishmatī. Most of the Yādavas except the Vrishnis were also known as Bhojas.

About this time, north Pañchāla was ruled by the powerful kings, Sriñjaya, Chyavana, and Sudās, of Rigvedic fame. Sudās drove the Paurava king, Samvarana, out of Hastināpura and brought on the Battle of Ten Kings against him. But his empire declined after him, and the Pauravas revived and recovered Hastināpura and conquered north Pañchāla. Under Kuru, the Paurava domination extended up to Prayāga. It suffered again a decline till it revived under Pratīpa and Sāntanu. Sāntanu's grandsons were Dhritarāshtra and Pāndu. Dhritarāshtra's sons led by Duryodhana were called Kauravas, while Pāndu's sons were the five Pandavas, Yudhisthira, Bhīma, Arjuna, Nakula, and Sahadeva.

Thus we arrive at the stage preparing for the Mahābhārata war in a continued history preserved in the Purāņas.

History after the Mahābhārata war : Possible Date of the War. The history subsequent to the Bharata War is also indicated in the Puranas. They also help us to work out the date of that war. This has been done by Pargiter as follows. Taking the beginning of Chandragupta Maurva's reign to be 322 B.C. (as settled on other grounds), we can work out the dates for the dynasties of his predecessors with the help of the Puranas. He was preceded by nine Nandas. Mahapadma and his eight sons, accounting for 100 years. The best reading ascribes to them a life, and not reign, of 100 years. Tf Mahāpadma became king at twenty, he became so in (322+80)402 B.C. Now, as to the length of time between Mahapadma and the Bharata War, there are three versions, of which the most reasonable one states that up to the time of Mahapadma's extermination of Kshatriyas, there had reigned the following Kshatriya kings (since the Bhārata War), viz. 24 Aikshvākus, 27 Pañchālas, 24 Kāšīs, 28 Haihayas, 32 Kalingas, 25 Aśmakas, 36 Kurus (Pauravas), 28 Maithilas, 23 Sūrasenas, and 20 Vitahotras. If we allow the reasonable time of twenty years for Mahapadma's conquests, these should have been completed by (402-20) 382 B.C. Besides this list of contemporary kings of ten dynasties, there is a dynastic list given of the Paurava, Aikshväku, and Barhadratha kings, in which there is a line drawn between past and future kings. This line is drawn at the date of the Bharata Battle. The Aikshvāku list names twenty-five future kings from Divākara. as against twenty-four of the other list. The Paurava (Kuru) list mentions twenty-five future kings as against thirty-six of the other list. But there is a well-attested reading in which the figure given is twenty-six and not thirty-six. Thus there is practical agreement between the two lists as to the number of these kings and their reckoning from the same initial point up to

the other point, that of Mahāpadma's conquest in 382 B.C. Correcting now thirty-six Kurus into twenty-six, we get 257 contemporary kings in ten kingdoms, giving an average of twenty-six kings for each. If we take eighteen years as the average period for each king's reign, we get for twenty-six such kings the period of 468 years from (468+382) 850 B.C. The dynastic list for Magadha also leads to the same result. The future Barhadratha kings of Magadha number sixteen after Senājit, and these ruled, along with five Pradyotas, and ten Sisunāgas, up to the time of Mahāpadma's accession in 402 P.C. Omitting the Pradyotas, who were not kings of Magadha, as shown below, we get (850-402) 448 years for twenty-six kings, an average of seventeen years, which is not very improbable in that age of changing dynasties.

Finally, to arrive at the date of the Bhārata Battle, we must add to 850 B.C. the times of kings preceding the three kings of the dynastic list aforesaid, viz. five Pauravas, four Aikshvākus, and six Bārhadrathas, i.e. a mean of five for whom we can permit a period of 100 years, so that we obtain 950 B.C. as the date of the Bhārata Battle.

It is to be noted that this reckoning is based upon "averages (1) of the number of kings of eleven contemporaneous dynasties, and (2) of the lengths of reigns computed from the reliable data of fourteen historical dynasties in other countries", and so may be accepted as a "reasonable general approximation" [Fargiter, op. cit., pp. 179-183].

The only point that can perhaps be urged against Pargiter's reckoning is that it is based on an average of eighteen years for each king, which may be considered as rather a low average for the number of kings counted in that reckoning. There are also the two other sets of data which should not be completely brushed aside. First, there is the statement that between Mahāpadma's inauguration and Bhärata Battle there reigned in Magadha twenty-two Bārhadrathas, five Pradyotas, and ten Siśunāgas, who are said to have covered between them 1,408 or 1,498 or 938 years. Secondly, there is a statement of the Mahābhārata [Mbh, xiv, 66-70] to the effect that there was a peried of 1,050 (or 1,015) years between Mahāpadma's inauguration and Parīkshit's birth which took place soon after the Mahābhārata Battle. These figures are rejected by Pargiter on the

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ground that they land us in too high averages for each reign. Perhaps a via media may be found by taking each king to represent a generation when it is not clear that the succession had always been from father to son. If a generation is measured by 25-33 years, as is usually done, the Mahabharata total of 1.015 years or the lower total of 938 years will not then appear to be so extravagant. There is also another point of great chronological importance to be fitted into any scheme of reckoning that may be proposed. It is the synchronism between the following Bimbisāra, Udayana, Prasenajit. Pradyota, characters : Ajātaśatru, Buddha, and Mahāvīra, as established on the basis of both Pali and Jaina texts. Buddhist tradition fixes the time of the Buddha between 623-543 B.C., Mahavira predeceasing him by about three years. Several dynastic lists given in the Puranas lead up to the kings who were the contemporaries of the Buddha. Thus the Paurava list of Marsya Purana leads up to Udavana through a succession of twenty-five kings, or twenty-three generations between him and Abhimanyu, the second king in the list, who d'ed in the Bharata Battle. The second list is that of the Ikshvākus, which takes us to Prasenajit through a succession of twenty-four kings. If we omit from the list four names, viz. those of Sākya, the founder of the Buddha's family, his father, himself, and his son, evidently introduced by the Kosala bards to glorify the lineage of their lords, we shall have twenty-two generations between the Great Battle and the Buddha's time. The Magadhan genealogy also mentions twenty-two kings between Sahadeva killed in the Great Battle and Pradyota as successor of the last king, Ripuñjaya. Perhaps this is a mistake of the Puranas. The Pali texts point to Pradvota as one of Avanti, and not of Magadha, of which he was the most feared enemy. With the help of the Pali texts we can correct the mistake of the Puranas by omitting from the list the six Pradyotas succeeding Ripunjaya of Magadha and introducing as his successor Bimbisara as the founder of a new dynasty which counts Sisunaga as one of his successors and not as the founder of the dynasty, as the Puranas We thus find that the three contemporaries of have it. Prasenajit, and Udayana-belonced Buddha-Bimbisāra, respectively to the twenty-second, twenty-third, and twentyfourth generation after the Great Battle.

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We have, therefore, now to consider three sets of data which have to be reconciled in a common system, if possible. This is possible if we count a generation at thirty-three years within the time-limit established for a generation. On this basis, firstly, the twenty-fourth generation from the Buddha will lead to $(24 \times 33 + 623)$ 1415 B.C. as the date of the Bhūrata War. Secondly, thirty-one generations from Mahāpadma Nanda's time will establish $(31 \times 33 + 402)$ 1425 B.C. as the date of the same event. Thirdly, an interval of 1,050 years from Mahāpadma's inauguration will also make that date (1,050 + 332) 14.2 B.C. Thus these sets of data derived from different sources will practically yield the same chrono'ogical result, viz. the date of about 1400 B.C. for the Bhārata War.

Aryan Origins according to the Puranas. The traditional history of India, as we have seen, starts with the three stucks (1) Aila. (2) Saudyumna, and (3) Mānava or Mānya, with their centres at Pratishthāna. Gavā, Avcdhvā, and Mithilā. The other two stocks retreated before the expansion of the Ailas and their offshoots, who came to dominate, as we have seen, the whole of north India down to Vidarbha. Pargiter suggests the bold theory that the Ailas or Airas were the Aryans, the Saudyumnas the Munda race, and the Manvas, the Dravidians. The original abode of the Ailas was some middle Himalayan region, some northern country which the Puranas called Liavrita. Indian tradition knows nothing of any Arvan invasion of India from north-west and outside of India, nor of any advance of the Arvans from the west to east. On the other hand, it speaks of an Aila outflow, the expansion of the Druhyus through the north-west into the countries beyond. Accordingly, Rigveda x, 75, mentions rivers in their order from the east to the north-west, beginning with the Ganges, in accordance with the course of Aila expansion and its outflow beyond the northwest. Similarly, in the Rigvedic account of the Battle of Ten Kings against Sudās who was an Aila king of north Panchāla. as a ready seen, he is described as pushing his conquests westwards into the Punjab. This is also in keeping with the view that the bulk of the Rigveda was composed in the upper Ganges-Jumna doab and plain. The Rigveda holds the Sarasyati especially sacred, and also knows the Sarayu, the river of Oudh. This view seems to be further supported by

the mention of the Vedic gods. Indra. Varuna, Mitra, and Nāsatvas in the Boghaz-Koi Inscription of 1400 B.C. already noticed, proving that there was an outflow of people from India before the fifteenth century B.C. bringing her gods with them. and that Arvan origins and cultures in India were much earlier still. Pargiter goes further and works out a possible date for this Indian migration beyond the north-west. It was the Druhvu expansion which is indicated fifty-five steps earlier than the Bharata Battle in the genealogical table drawn up to illustrate the course of history from the Puranas. If twelve years are allowed for a step, the date of the Druhyu migration out of India would be (55×12) 660 years previous to the Bhārata Battle of about 1000 B.C. Thus it took place in the seventeenth century B.C. so as to explain the possibility of Vedic gods being known in Mesopotamia in the fifteenth century B.C.

Links with Vedic Chronology. The date of the Bhārata war and of Parīkshit as søttled above will also help to settle some points of Vedic chrono'ogy. According to the Mahābhārata, Parīkshit who came to rule at Hastināpura as the son of Abhimanyu, son of Arjuna, was succeeded by his son, Janamejaya, who is known for two important events. He performed a snake-sacrifice at Takshaśilā and also heard the Mahābhārata itself being recited for the first time by Vaīšampāyana.

It is interesting to note that certain Vedic works, the *Atharva-veda*, the *Satapatha*, and the *Aitareya Brāhmanas*, and also the *Brihadāraŋyaka Upcnishad* also know of Parīkshit and Janamejaya, but with totally different traditions which show them to be different persons who had lived in much earlier times than their namesakes of the Purāņas.

The Brihadāraņyaka Upanishad (iii, 3) has the following question : "Whither have the Pārikshitas gone?" And also the reply : "Thither where Asyamedha sacrificers go."

This reference shows; (1) that the Pärikshitas had already become a past history and a vanished glory by the time of this Upanishad; (2) that they must have committed some grievous sins leading to their extinction; (3) that they performed Asyamedha sacrifices to atone for their sins but in vain; (4) that these particular Pärikshitas, by their performance of horse sacrifice, are to be distinguished from the Janamejaya of the *Mahābhārata*, who was known for his snake-sacrifice.

It will now be seen that the story of the $Brihad\bar{a}ranyaka$ is an echo of the earlier accounts of the Pārikshitas as given in the other Vedic works aforesaid.

The glory of a Pārikshita and the zenith of his power are first indicated in the *Atharva-Veda* (xx, 127, 7-10) which tells of the proverbial plenty of the Kuru kingdom under him in "curds, drinks, and barley".

The Satapatha Brāhmana (xi, 5, 5, 13) also tells of the "Palace of Janamejaya, Pārikshita", its bounty of "sweet drinks" ($p\bar{u}rn\bar{a}n$ pariśruta-kumbhān), its "prize-winning horses". The same text also tells how Janamejaya Pārikshita had "bound for the gods a black-spotted grain-eating horse adorned with a golden ornament and with yellow garland at his city of Asandīvān" (xiii, 5, 4, 1-4).

The Aitareya Brāhmana also has its own story to tell of the glory and the power of Janamejaya in several passages.

In one passage (vii, 27) Janamejaya Pārikshita is referred to as having performed a sacrifice from which he had excluded Brahmins of the clan of Kaśyapas. This passage gives the first hint of Janamejaya's hostility to Brahmins, which was fraught with grave consequences to the fortunes of himself and of his dynasty. In the other passage (vii, 34), he is described as a great king, who, "like Āditya in prosperity gave heat, obtaining tribute from all the quarters, whose sway was dread and unassailable."

There is again another passage (viii, 21) which tells how his priest "Tura Kāvasheya anointed Janamejaya Pārikshita with the great imperial sacrifice known as Aindramahābhishcka". Therefore, Janamejeya "went round the earth completely, conquering on every side, and offered the horse in sacrifice. Regarding this a sacrificial verse is sung :

> 'At Asandīvant a horse, grass-eating, Adorned with gold and a yellow garland Of dappled hue, was bound By Janameiava for the gods."

It may be observed here that in the Aitareya, "Janamejaya is described as having performed a horse-sacrifice" to celebrate his attainment of imperial status, and not for the atonement of any sin, of which it does not contain a single hint. This makes the Aitareya tradition older than that of \$atapatha or the Brihadāranyaka. Indeed, as Keith points out in his translation of Aitareya (p. 45), "the time of Aitareya is that of Bhāratas of Madhyadeśa, the time when the fame of Janamejaya was at its height." He further states : "The period of Janamejaya is doubtless that of the close of the earlier Vcdic period of the Samhitās and they accord well with the position he holds in the Aitareya." There is in the Aitareya no hint of the decline of that position.

The story of the sin of Janamejaya which is hinted at in the $B_{fihad\bar{a}ranyaka}$ is, however, given in the satapa!ha $Br\bar{a}hmana$ which states that "Janamejaya and his sons, grandsons of Parikshit, the Pärikshitīyas, performing horse-sacrifices. by their righteous work, did away with sinful work one after another." In the same text, this sin is also described as that of Brahmahatyā, i.e. the slaughter of Brahmins. His sons are also named as Bhīmasena, Ugracena, and Śrutasena, Pārikshitas. The priest employed for this explatory horse-sacrifice is named Indrota-Daivaka Saunaka. Janamejaya's priest in the Aitareya is a different person named Tura, because he was concerned with caremonies performed for a different purpose, and not for atonement of sins.

The tradition of the sin to which Janamejaya and his sons had succumbed is carried down to the time of Kautilya who, in his Arthaśāstra, gives the following reference: "Kopāj-Janamejayo brāhmaņeshu vikrāntaḥ," i.e. "Janamejaya lost his great power by his sin of wrath and violence against the Brahmins."

These several Vedic traditions about Parikshit and Janamejaya must make them different from, and older than, the persons of the same name who are concerned with the *Mhāhhārata* tradition. This view is confirmed by the Purānas which know of two Parīkshits and three Janamejayas in the same dynasty It is, therefore, reasonable to assume that, leaving out of account Janamejaya I as a very remote ancestor, Parīkshit I and his son, Janamejaya II, were the subjects of Vedic tradition and Janamejaya III the subject of that of the *Mahābhārata*. Considering also that the Purānas place more than twenty generations between Janamejaya II and Janamejaya III and counting the date of Janamejaya III to be about 1400 B.C. we may conclude that the time of Parikshit I and Janamejaya II and of *Satapatha* and the *Aitareya Brāhmaņas* should be about 2000 B.C. This date for the *Brāhmaņa* works will further push back the date of Vedic Samhitās and, finally, of the *Rig-Veda* which may thus be linked up with the time of the Indus Civilization disucussed above.¹

The Law-books. Much light is thrown on ancient Hindu civilization by the law-books or Dharma-sästras, of which the chief or representative works are those of Manu, Vishuu, Yājñvalkya, and Nārada, all in verse except that of Vishuu. All these works in their present forms include additions made to them from time to time, like the Epics.

Manu Smriti²: Its age. The Dharma-Sāstra of Manu is the standard and most authoritative work on Hindu law and presents the normal form of Hindu society and civilization. The name Manu is of heary antiquity, being that of the first progenitor of the human rare, the first king, and the first lawgiver; mentioned as a Vedic Rishi in the Taittirīya and the Maitrāyanīya Samhitās [ii, 2, 10, 2: i, 1, 5] and in the Chhāndogya Upanishad [viii, 15] and as a law-giver in the Tāndya Brāhmana [xxiii, 16, 7]. Even Yāska [c. 700 B.C.] in his Nirukta [iii, 1, 4] cites a śloka of Manu as a legal authority, stating that the sons are to obtain their father's property in equal shares. The Dharmasūtras of Bodhāyana [iv, 1, 14; 3, 16] and Āpastamba [ii, 16, 1] also cite Manu as a legal authority.

Thus, though the sayings or verses of Manu were very old, they were receiving additions in time till they were collected in what is known as the *Manu Smiti* or *Mānava Dharma-Sāstra*, a composition of much later dat². This Dharma-Sāstra must have been the work of the Mānava-Sūtra Charana. This Charana or Vedic school based itself on a sākhā of the Black Yajurveda and developed its own Dharma-Sūtra, that of Manu.

¹ Adapted from my Presidential Address before the History Section of the Oriental Conference meeting in Mysore in December, 1935. ² I am indebted to the thesis on the subject presented for the M.A. Degree by my esteemed pupil. Dr. Vasudeva Sharana Agrawala, M.A.LLB., PH D.D.LITT., now Professor of Fine Arts in the Hindu University, Banaras. In those days, as indicated by Pānini [iv, 3, 126; 2, 46], each Charana was known not merely for its *Ammāya* or the Vedic text it studied, but also for its *Dharma* or its particular legal code. For example, the term *Kāthaka* indicated the school of Kathas, and also the Kāthaka Dharma-Sūtras, of which the present *Vishnu Smriti* is the metrical recast. Thus arose the present *Manu Smriti*, a product of the Maitrāyanīya Charana of Black Yajurveda.

While the *Manu Smriti* refers to the older Dharma-Sāstras [iii, 232] such as those of Atri, Vasishtha, Gautama, and Saunaka [iii, 16], it is itself referred to by the Dharma-Sāstras of Yājñavalkya [i, 4, 5] and Vishnu which follow it closely, and of Nārada and Brihaspati, all of which are thus later works.

Geographical Horizon. The geographical horizon of the Manu Smriti is confined to the north of the Vindhyas, as against that of Apastamba, Hiranyakesin, and Bodhayana, followers of Taittiriva schools, lying to the south of the Narmada. Manu mentions four regions of Aryan culture in the order of their (1) Brahmāvarta b tween the Sarasvati and siza viz. Drishadvati (modern Hissar district of the Punjab), (2) Brahmarshideśa comprising Kurukshetra, Matsya, Pañchāla and Surasena, (3) Madhyadesa between the Himalayas and Vindhyas and Sarasvatī and Prayāga, and (4) Arvāvarta betwhen the two mountains and the two oceans, the habitat of the black antelope,¹ the land of Vedic Yajñas, outside of which lay the Mlechchadesa or non-Aryan world, comprising the territory from the Sutlej to the Kabul in the north and Dravida country in the south [ii, 17; 19; 23]. Manu probably 1 gislated for Brahmarshideśa, as may be inferred from two passages. In the first [viii, 92], it is stated that the truthful man need not visit the Ganga or the Kurus. The second [xi, 77] locates a pilgrimage along the course of the Sarasvati.

Post-Buddhist features. That the Manu Smriti was a post-Buddhistic work is probably indicated by its mention of (a) such historical peoples as the Kāmbojas, Yavanas, Sakas, Fära-

¹ "It deserves to be noted that the black antelope selects for its heme the well-cultivated rich plains of India only, and is entirely wanting in the sandy, mountainous or forest districts, which are new, just as in ancient times, the portion of the aboriginal tribes". [Bühler, SBE., xiv, 3, n. 13.] das, Pahlavas (Parthians), Chīnas, Kirātas, Daradas, Khasas, Chodas, and Drāvidas [x, 44] as disqualified Kshatriyas; (b) Šūdra kings transgressing the Šāstras [iv, 61; 87,]; (c) women joining heretical sects [v, 90]; (d) insult to Vedas and gods [iv, 163]; (e) Chaitya trees as haunts of bad characters [ix, 264]; and (f) non-Vedic Smritis and philosophies [xii. 95], most of which are associated with Buddhism.

Polity: Multiplicity of States. Manu refers to svarāshtra [vii, 32] and pararājya [vii, 68], to friendly and hostile states (mitra-śatrurāshtra) [vii, 32], to a circle of States (mandala) [vii, 154], in different degrees of friendliness with one another, with the madhyama, middlemost State, at the centre, to neutral (udāsīna) States, and to the Vijigīshu with lust for conquest [ix, 312]. This shows that Āryāvarta to which Manu confines his attention was in his time split up into a number of States and was not politically united.

The State known to Manu. The kingdom which Manu had with n his purview was that for which the army was recruited from the four regions called Kurukshetra, Matsya, Pañchāla, and Sūrasena [vii, 193], i.e. the *Brohmarshideśa* as defined above. Its capital was at a distance from both Kurukshetra and the Gangā [viii, 92].

Political Divisions. A kingdom was called a $r\bar{a}shtra$, its citizens $r\bar{a}shtrikas$ [x, 61], its king, the $r\bar{a}j\bar{a}$, and his subjects, the prajā [ix, 226]. A $r\bar{a}shtra$ was made up of different countries, Deśas [ix, 251], or provinces called Janapadas or Vishayas [vii, 134].

Feudatorics. The $R\bar{a}j\bar{a}$ had his satellites or feudatory chiefs called $S\bar{a}mantas$ whose loyalty was enforced [vii, 69; ix, 310], as well as military help [ix, 272].

Administrative Divisions. The administrative divisions were organized in a decimal system made up of (a) the village. grāma, as the smallest unit, under the Grāmaņā [vii, 120], (b) the group of ten villages under the officer called Daśi [vii, 115], (c) the group of twenty villages under the Vinisi, (d) the group of 100 villages under the Sateśa, and (e) the group of 1,000 villages under the Satesia in an ascending order of authority. Instead of 1,000 villages, Vishnu speaks of the "whole country".

Payment of Officers. These officers were paid in kind; the Gramani in food, drink, fuel, vegetables, etc. [vii, 118], the Dasi in land sufficient to support one family, the *Vinisi* in land adequate for five families (and requiring twenty ploughs for its cultivation), the *Satesa* in the revenues of one village and the *Sahasresa* of one pura or town [vii, 119].

Council and Assembly. The king is described as occupying the supreme position in the State and as the sole protector of his people [v, 94]. He ruled with Assistants, called Sahāyas or Secretaries [vii, 31, 36], with the advice of a Cabinet, Parishad, of seven or eight ministers, of whom the chief was called Mukhyāmātya [vii, 58]. The king gave audience to the people in his Sabhā [vii, 146].

There was no privacy for ordinary (*sāmānya*) business of administration, but the king took counsel with the Prime Minister alone on grave (*parama*) matters of State [vii, 58, 59].

Portfolios. There were administrative departments like (a)Finance, in charge of the king himself. It included taxation, collection of revenue, and supervision of mines and stores [vii, 62]; (b) Inspection, *chārakarma*, to supervise the work of government officers of all ranks [vii, 81]; (c) Military and Police, under a civil minister or Amativa, though the commander-in-chief (*Senāpati*) and the general of the army (*Balādhyaksha*) were in power on the field [vii, 65, 189]; (d) Local Government under a special minister to attend to all the village and district officers of the decimal system aforesaid and to settle disputes of jurisdiction [vii, 120].

Defence. The defence of the realm was organized by posting *Gulmas* or Garrisons for every 200, 300, or 500 villages [vii, 114]. They were practically distributed over the whole country [vii, 190].

Government Servants. Government servants were called Yuktas [viii, 34]. The superior officers were called Mahāmātras [ix, 259].

Cities. Cities (*Nagaras*) were in charge of special officers of high rank [vii, 121], with powers over the police and spies [vii, 122, 123] and even over district officers or lords of 1,000 villages [vii, 122], and having within his purview all matters pertaining to the city (*Sarvārthachmtaka* in vii, 121). The site of a city or dapital was chosen with reference to its strength of natural and artificial fortifications [vii, 70], such as ditch $(parikh\bar{a})$ [ix, 289], and palisade walls $(pr\bar{a}k\bar{a}ra)$ with gateways. The variety of interests that had to be administered in a city will be evident from the presence in it of institutions like the assembly hall $(sabh\bar{a})$, tanks $(prap\bar{a})$, victuallers' shops or hotels, taverns, places for festivities and theatres $(sam\bar{a}ja-prekshan\bar{a}ni\ chc)$, labour colonies $(k\bar{a}ruka-vesana)$, brothels [ix, 264-5], stores $(koshth\bar{a}g\bar{a}ra)$, and magazines $(\bar{a}yudh\bar{a}g\bar{a}ra)$ [ix, 280].

Villages. Village administration had similarly to look after the rural institutions like wells $(k\bar{u}pa \text{ or } udap\bar{a}na)$, tanks $(tad\bar{a}ga)$, ponds (sara), recervoirs $(v\bar{a}pi)$, fountains (prastavana), embankments (setu), groves (upavana), parks $(\bar{a}r\bar{a}ma)$ [iii, 201-3], cowpens accommodating up to 1,000 cows and in individual or collective ownership [xi, 127], and pasturegrounds $(parih\bar{a}ra)$ of average width of 600 feet open to all cattle of the village [vii, 237-8].

Elements of Democracy. The autocracy of the Hindu king admitted of a considerable degree of self-government to the people. The king's position was mainly that of the Danda or the executive to uphold and enforce the Dharma or law. The sources of Dharma are stated by Manu to be (a) Veda or Siuti, (b) Smriti or Dharma-sastra, (c) Silu, and (d) Achara, the customs of holy men. Doubtful points of Dharma were to be settled by a body of experts, or Sishtas, (well-versed in sacred lore), which was called Parishad. The Parishad was to be composed of members numbering from three to ten. The ten members comprised three proficient in the three Vedas, one Logician (Tārkika), one Mīmānisaka, one Nairukta, one Dharma-pāthaka (reciter of law), and three members of the three āśramas (i.e. those of the student, the householder, and the hermit) [ii, 6; xii, 110-12]. Next the people were left to legislate for themselves through the groups to which they belonged, the Kula or family, the Jäti or caste, the Sreni or guild, or the Janapada, the region. The king's duty was to recognize and enforce the laws laid down for themselves by these self-governing groups, communities, and corporations, and the laws of different regions [viii, 41, 46].

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Social Conditions. The first social distinction was that of the $\bar{A}rya$ and $An\bar{a}rya$ [x. 66-7], also called Dasyu [x, 45] and *Mlechchha* [ii, 23]. The term Dasyu is also applied to the Chandālas, Svapākas, and others [v, 131; x, 51] who were inferior to the Sūdras [viii, 66].

Non-Aryans. They were of nomadic habits (*parivrajyā cha nityašah*) and lived outside the village near the cremation ground or *chaitya*-trees, forests, and mountains. They used broken utensils. Their wealth consisted of dogs and donkeys, dress of that of dead persons, food of picked-up remnants from broken plates, and ornaments of black iron. They were not allowed to enter the village at night, and in day time only on express business and wearing their prescribed marks. They were employed to carry unclaimed corpses to the cremation ground and as hangmen [x, 51-6]. They lived by hunting [v, 131], were not eligible as witness in court [viii, 66], and had no property rights, for "a Kshatriya when starving may snatch the property of Dasyus" [xi, 18].

Aryan Society. It was made up of the *Dvijātis*, the three twice-born castes of Brāhmanas, Kshatriyas and Vaiśyas, and the *Ekájātis*, the Śūdras. There was no fifth *Varna* or caste [x, 4].

There were mixed castes $(antara-\dot{p}rabhav\bar{a}h)$ springing from adultery, marriage with ineligible women, and violation of the duties of caste [x, 24]. Intermarriage between castes produced a crep of unclassified progeny who were all branded as Sūdras [x, 41] and described by their occupations (*svakarmabhih*) [x, 40].

There was a catholic rule that "he who was begotten by an Aryan on a non-Aryan female may become an Aryan by virtue" [x, 67]. This was probably to accommodate the foreigners and the artisan classes "whose hand was always pure" (*nityani śuddhoh kárukahastah*) [v, 129]. These new Sūdras were given a higher status than the *born* Sūdras and Untouchables.

Castes. Social life was governed by the regulations of Caste and Aśrama, of what is known as *Varņāśrama-Dharma*.

Brāhmaņa. The highest caste was that of the Brāhmaņa [i, 100]. But his status depended not upon his material possessions but on his character and spirituality. He was known HC-9 for his knowledge of the Absolute (*brahma-dhāraņa* in i, 92), for his asceticism (*niyama-dhāraņa* in x, 3), and for his universal goodwill (*maitro brāhmaņa uchyate* in ii, 87). He acted as teacher, priest, judge [viii, 9], prime minister [vii, 58], assessor [viii, 10, 1] and as member of the *Dharma-Parishad*, the *standing legal* commission [viii, 20].

He was punishable in law but not by capital punishment [viii. 380].

A Brāhmaņa degraded himself by violating restrictions regarding acceptance of food and gifts, pursuit of occupations or professions [iii, 150-166; iv, 153-4], and earning livelihood on the strength of his birth or caste alone without its virtues or ideals [vii, 85 ($j\bar{a}tim\bar{a}tropaj\bar{v}\bar{v}$)].

Kshatriya. The duties common to the three twice-born castes were (1) study, (2) performance of sacrifice $(yaj\bar{n}a)$ and (3) charity. The special duty of the Kshatriya was the practice or arms and pursuit of a military career [x, 79].

Vaiśya. His special dutics were (1) agriculture (*Krishi*), (2) trade (*Vipaņi-karma*), (3) commerce (*Vāņijya*), and (4) cattle-rearing (*Pāśupālya*), all described by the general term *Vārtā* [ix, 326]. His wealth was the support of Brāhmaņic institutions [xi, 12]. He was permitted sea-voyage [iii, 158 (*samudra-yāyī*)], for which he knew a variety of languages [ix, 332].

Sūdra. Service was his portion in life [viii, 410, 413] including removal of dirt, filth, carcases, and other unclean work. He was not eligible for the sacraments (*Samskāras*) nor for hearing sacred texts except their substance [iv, 99; x, 2]. But he was not denied the rites of marriage, cooking of daily food in the grihya fire, and Śrāddha [iv, 223; iii, 197]. Manu mentions even Sūdra teachers and pupils [iii, 156], showing that the Sūdra was not prohibited from studying [ii, 238, 240]. As representing the lowest level of culture, the Sūdra majority (*Sūdra-bhūyishtham*) in a country would spell its doom [x, 61, 125].

Slave. He might be of seven descriptions; a captive in war $(dhvaj\bar{a}hrita)$, a slave for food $(bhakta-d\bar{a}sa)$ a hereditary slave (grihaja), a slave acquired by purchase (krita), or by

gift (datrima), or by inheritance (paitrika), and a slave under debt ($danda-d\bar{a}sa$). He could not change his status which was due to birth. Nor could he own property [viii, 414-17]. But the evils of the system were mitigated by the humane treatment which the master was bound to show to his slave [iv, 180; x, 124].

Woman. The woman was not eligible for the study of the Veda nor for use of *mantras* in performing her sacraments (sainskāras) except marriage [ii. 65; ix, 18]. She was to be under the guardianship of her male relations, of father as virgin, of husband as wife, and of her sons as mother in old age [v, 148; ix, 3]. She could not own property [viii, 416] except strādhana or gifts made to her [ix, 194]. Her main work was to manage the household, including keeping and spending wealth [ix, 11].

Aśramas. These were four in number, viz. those of the *Brahmachārī*, *Grihastha* (householder), *Vānaprastha* (hermit), and *Sannyāsī* (ascetic) and were obligatory on all the three higher Castes. Thus while the Castes divided, the Aśramas were the uniting and equalizing factors in society.

Studentship. Studentship began with the ceremony of *Upanayana*, which was performed at the ages of 8, 11, and 12, for the Brähmana. Kshatriya, and Vaisya pupils respectively. The ages might be 5, 6, and 8 for a precocious pupil [ii, 36-7]. Studentship meant living in the home of the teacher who prescribed a course of discipline and austerities as regards dress, food, and habits, based on what is called *brahmacharya*, or control over senses [ii, 93, 94 (*indriyasanyama*)]. The aim of education was both intellectual (*Veda-grahana*) and spiritual development (*vratādeśana*) [ii, 173] on the basis of *tapas* or meditation [ii, 164 (*tapah Brahmādhigamikam*)].

The student's daily duties comprised (1) performance of Sandhyā and Agnihotra [ii, 101, 108], (2) tending sacred fire [ii, 187], (3) $sv\bar{a}dhy\bar{a}ya$, (4) begging for his teacher or school, (5) fetching water, fuel, earth, flowers, etc., from the field and forest, and (6) attending to the lecture (*pravachana* or *nirva-chana*) of his teacher.

Subjects of Study. These consisted of (1) the three Vedas called Sruti [ii, 10; xi, 264] read in their different texts

called Sākhās cultivated in different schools called Charanas [iii. 145]; (2) select Vedic hymns and verses [xi, 249, 260]; (3) Atharvaveda [xi. 33], to ward off evil; (4) Brāhmanas, of which Manu mentions Aitareya [vi, 3], to be included in Svādhyāya [iv, 100]; (5) Āranyakas to be studied after finishing the Veda [iv, 123]; (6) Upanishads containing the rahasva or esoteric matter of the Veda [ii, 140] and forming the concluding parts of Aranyaka works, on which Manu says : "A Brahmana dwelling in the forest must study the sacred texts contained in the Upanishads in order to attain complete union with the Supreme Soul" [vi, 29]; (7) Vedāngas, six in number [iii, 185], such as Nirukta and Kalpa [xii, 111; ii, 140]; (8) Darśana-Sāstras, of which Manu mentions Mīmāmsā, Nyāva [xii, 111], Vedānta [ii, 160], and probably Yoga, too [vi, 72]; (9) Dharma-Sāstras or Smriti [ii, 10; iii, 232]; (10) Itihāsa and Purāna [iii, 232]; (11) Vaikhānasa Sutra for recluses [vi, 21]; (12) Heretical Sastras [xi, 65: xii. 95], and (13) Varta or secular subjects with many branches [iv, 19; ix, 331-2], including Anvikshaki (dialectics) and Dandanīti (politics) [vii, 43].

Specialization. Students specialized as Vaidikas cr $s\bar{a}strins$. The aim of the former was mastery of the four Vcdas [iii, 184] or less, up to one [iii, 2], or even of one of its $s\bar{a}kh\bar{a}s$ or a portion thereof. The more successful became known as *Srotriyas*, *Ritvijas*, or *Brahmavādis* [iii 128; ii, 143; ii, 113]. The Sāstrins specialized in the Sāstras or Vedāngas.

Period of Studentship. It depended on the subject of study, and might be 36, 18, or 9 years, or the time required for the study of one Veda [iii, 1, 2]. A student might break off after completing his study but not fulfilling his vow; or fulfilling the vow without completing his study; or completing both study and vow; and would be known respectively as $Vidy\bar{a}$, or Vrata, or $Vidy\bar{a}$ -Vrata- $Sn\bar{a}takas$ [iv, 31]. A student devoting his whole life to study would be called a Naishthika [ii, 243].

Academic Year. It was of two terms. Each term was inaugurated by a public ceremony called *Upākarma* and ended by another called *Utsarga*. The first term for Rigvedins and Yajurvedins began on the full moon day in Śrāvaņa (July) and for Sāmavedins a month later [iv, 95]. It was devoted to study of the Vedas and continued for about four months and a half. It closed in the month of Pushya (December), or on the first bright day of Māgha (January) [iv, 97]. A break of three days was allowed after both $Up\bar{a}karma$ and Utsarga. If the Utsarga fiell in Māgha, the second term would begin on the fifth day of the bright half of that month, what is now called Vasanta-pañchami, or Sarasvatī Pūjā day. The second term was devoted to the Vedāngas.

The academic year had its holidays, called Anadhyāyas, comprising the two Ashtamīs, two Chaturdašīs, Amāvasyā and Pūrnimā, in every month, the six holidays fo'lowing Upākarma and Utsarga, and the last day of each of the four seasons called *Chāturmās*ī [iv, 113, 119, 26; vi, 10]. Besides these regular (*nitya*) holidays, there were also occasional (*naimittika*) holidays due to accidental circumstances such as storm, thunder, rain, fog, fire, dacoity, or eclipse.

Teachers. They were of two classes called (1) $Up\bar{u}dh$ yāya who took to teaching as a profession for his livelihood [ii, 141] and taught only a portion of the Veda or Vedlinga [ib.]; (2) $\bar{A}ch\bar{a}rya$ who taught the pupil the Veda with its Kalpasūtras and Upanishads [ii, 140], and who taught him free. sūtras and Upanishads [ii, 140], and who taught him free. The pupil after completing his education could give him such presents as he could afford—field, gold, cows, horse, umbrella, shoes, grain, vegetables, or clothes [ii, 246].

The paid teacher and the paying student were condemned as unworthy of invitation to a Śrāddha [iii, 156].

Besides the ordinary teachers, Manu refers to educational experts (adhyāyajñāh=adhyāpanavidhijñāh) (iv, 102) who were proficient in pedagogy.

The Last Two Āśramas. The third \bar{A} srama was that ef the Vānaprastha, one who took to the woods, renouncing the world, and living in a hermitage [vi, 7] where he subsisted on wild corn, fruits and vegetables, even manufacturing his own salt [vi, 12]. He was permitted to glean his stock of corn twice in the year [vi, 14]. The fourth \bar{A} srama was that of the Sannyāsī, a wanderer, living on one meal a day [vi, 55] obtained by begging, practising Hatha-yoga [vi, 70-2] and Dhyāna-yoga [vi, 73], and meditating on the Atman of the Vedānta or Upanishad [vi, 83]. Manu mentions women ascetics of heretical sects who must have been Buddhist nuns [v, 90; viii, 363].

Economic Life. Manu knows of both urban and rural life, of cities (nagara), towns (pure), and villages (grama).

Building. Houses were constructed of mud, brick, stone, and timber [viii, 250], and in rows [viii, 392] with lanes and roads between them [iv, 45 (patha); ix, 282 ($r\bar{a}jam\bar{a}rga$)], and also of several storeys [iii, 91 (prishtha)]. The art of building was called Vāstusampādana [iii, 255] and the architect or the building engineer Griha-samvešaka [iii, 163]. Houses were separated by defined boundaries on which the neighbours' verdict was final on disputes [viii, 262].

Temples were built in the outskirts to serve as boundary marks [viii, 248].

The public works of utility of both towns and villages have been already noticed.

Agriculture. It depended on a knowledge of seeds, of varieties of soil, and of its qualities [ix, 330]. The genuineness of seeds was guaranteed by penalty [ix, 291]. Areas sown were called *kedāras* [ix, 38]. The crops grown included cotton, barley, wheat, rice, mudga-beans, sesame, māsha, sugar-cane, and vegetables [ix, 39]. Two harvests were usual, spring and autumn [vi, 11].

The agricultural implements included wooden plough tipped with iron [x, 84], yoke for cattle, rope and leathern vessel for irrigation from wells [ix, 293].

Cultivation was by the Sūdra labourer and on the basis of stipulated terms, such as half the share of the produce to the cultivator [iv, $253 \cdot (\bar{a}rdhika)$] who supplied also the seeds [ix, 53]. The royal share was one-fourth, one-eighth, or one-twelfth, according to soil [vii, 130]. The king was to ensure proper cultivation by penalties [viii, 243].

The live-stock included buffalo, cow, sheep, and goat, tended by professional herdsmen $(pa \le up a l a h)$ who were responsible for their protection from wild beasts and thieves [viii, 232-5].

Dairying, selling of milk and ghee was known [iv, 253; viii, 231 (kshīrabhrit)]. There is also mention of dealers in sheep [iii, 166] and wool $(\bar{u}rn\bar{u})$.

Arts and Crafts. There were artisans (silpinah), craftsmen $(k\bar{a}ruk\bar{a}h)$ [x, 100] and mechanics $(yantra-pravarlak\bar{a}h)$ [xi, 64], who were socially higher than Sūdras [x, 99]. Every artisan had to contribute to the king a day's labour every month [vii, 75, 138].

Among individual arts and crafts are mentioned those of the goldsmiths [ix, 292 (hemakāra)] not known for any special honesty [ib.]: the blacksmith [iv, 213 (karmara)] who smelted iron rods in the furnace [iii, 133 (diptasiila)] and made the plough (sita), spade [xi, 133], spear [iii, 133 (rishti)], spike [viii, 315 (sakti)], iron staff [ib., (āyasadanda)], weapons lix. 293; x, 79], long nails [viii, 271 (Sanku)], iron balls [iii, 133]. hollow iron image [xi, 103 (sūrmi)] and iron bed [viii, 372 $(\bar{a}vasa-\dot{s}avana)$]; the dyer [iv, 216]; the launderer [ib.]. who used soap-berries for washing blankets, alkali for silk and woollen clothes, and white mustard for linen [viii, 396]; the oilman [iii, 158], working with a press [iv, 85 (chakra)]: the tailor [iv. 214 (lunnaväya)]: the weaver [viii, 397 (lantuväva)] who ginned cotton and separated the seed [iv, 78 ($k\bar{a}rp\bar{a}s\bar{a}sthi$)], then spun yarn (sulra-lantu) and wove it into cloth of cotton. silk, linen, and wool, producing eleven palas of cloth out of ten of varn [viii, 397] and also fine cloth for export [viii, 321]: the potter [viii, 327]; the worker in cane and bamboo [ib.]. makers of bow and arrow [iii, 160]; brick-kilners [viii, 250]: the leather-worker [x, 36, 49 (charmakara)], making bags (*īna*), shoes (*upānaha*), whips (*sīphā*) [viii, 369], and the like; and the distiller (saundika)

Trade. There were both money economy and barter [x, 94]. Prices were fixed by government in consultation with traders with reference to the following points, viz. export ($\tilde{a}gama$), import (nirgama), period of storage in shep ($sth\bar{a}n.s$) and changes of demand and supply [viii, 401]. There is also mention of Syndicates of Traders ($Kul\bar{a}h = Vyavahart/ri-Sam\bar{u}h\bar{a}h$ [viii, 201]) who controlled the market and its transactions. Adulteration was punished by law [viii, 203] as well as use of false weights and measures [ix, 286-7].

The trade-routes led through forests, marshes, and jungles [vii, 185]. The transport was by men, animals, and wheeled carts [viii, 405].

Riverine traffic was by boats, for which fares were determined by distance and local rates [viii, 406].

For sea-borne traffic the shipping charges were not fixed, "as the distance could not be measured" [*ib.*].

The owners of boats or ships were liable for loss caused by their own errors of navigation but not for loss caused by accidents over which they had no control [viii, 408-9]. There was thus an idea of Insurance in this provision. These boatmen and shippers carried on their business as a partnership concern, of which the loss and profit were distributed according to shares contributed [viii, 408].

The export trade was controlled by the Government. "The property of a trader was confiscated if he exported goods of which the king had a monopoly or the export of which was forbidden" [viii, 399], e.g. "elephants in eastern countries; saffron, silks, and woollens in Kāśmīra; horses in western countries; precious stones, pearls, etc., in the southern countries"; "generally articles that are rare in other countries had their exports restricted [Medhātithi]. As to forbidden exports, Medhātithi instances export of food grains during famines which were known to Manu [viii, 22].

Taxes on Trade. Trade had to pay customs, excise, and octroi, called by the general name of S:uka. The duties were levied on the principle that both Trade and the State should receive their due shares of profit [vii, 128]. They were fixed with reference to buying and selling rates, distance of transport (*adhvānam*), principal and subsidiary charges, and risk in transit [vii, 127] by the Octroi officers in consultation with the merchant representatives [viii, 398] and amounted to a twentieth of the sale-price [*ib.*]. The collection of the tolls was duly oraganized by building stations on recognized traderoutes and posting officers on duty up to night and with power to examine every article of merchandise as to number, quantity, and quality, to verify statements made about them. False statement was penalized, as also smuggling of goods in hours

or by routes which were unauthorized [viii, 400]. Ferries were maintained by the State by charges varying according to load, with exemptions to students, anchorites (*pravrajita*), hermits (*muni*), and pregnant women [viii, 407].

Banking. Money was lent out on interest (*vriddhiprayoga*) [ix, 333; x, 115] on promissory notes (*karanam*) [viii, 154] to be renewed every year [viii, 155]. Debtors were protected by law which disallowed (1) compound interest (*chakra-vriddhi*), (2) interest above customary rate, (3) interest equal to the amount of the principal, (4) personal service in lieu of interest, and (5) exorbitant interest agreed to under coercion [viii, 153]. The usual rate of interest was 15 per cent [viii, 140]. Higher rates pointed to unsecured loans [viii, 142], as explained by the commentators.

Coins. There was gold, silver, and copper currency [viii, 131]. The gold coin was called $Suvarna = 80 K_{Tishnalas} = 150$ grains. The silver currency included the following varieties :

- 2 Krishnala = 1 Raupya-Māsha.
- 10 Māshas = Dharana.
- 10 Dharanas = Satamāna.

The copper coin was called Kārshāpaņa = 80 Krishņalas = 150 grains [viii, 135-6]. It was usually called simply *paņa*. The smallest coin was $\frac{1}{2}$ th *paņa*. A paņa was in fact subdivided into half, one-fourth, and one-eighth, for which the corresponding coins were called ardha-paṇa, pāda-paṇa, and pādārdhapaṇa [viii, 404]. Servants were paid daily wages ranging from 1 to 6 *paṇas* [vii, 126].

The relative values of gold, silver and copper coins are not clearly indicated. In one passage [viii, 234], 6 nishkas of gold represent higher value than 100 panas.

There were special officers to guarantee the standard of weights and measures and examine it every six months {viii, 403].

Mining. The use of the following metals was known, viz. gold, silver, copper, bronze $(k\bar{a}msya)$, lead (saisaka) [xi, 133], pewter $(\tau aitya)$ [v, 114], iron and tin (thapu) [v, 114]. Alkalis and acids were used for purifying metals [v, 114]. There is

mention of iron derived from ore [ix, 321 (aśmato lohamulthitam)]. Slabs of stone were in use [xi, 167 (upala)]. There was also mining of precious stones like diamonds [viii, 100 (aśmamaya-ratna)]. Mining was subject to State-licence [xi, 64] by which the king was entitled to half the profits [viii, 39] which were collected by special officers called Artha-Samāhartās [vii, 60].

The other Law Books. These are subsidiary to Manu and call for short notice.

Vishņu-Smŗiti. The Vishņu-Smŗiti contains some amount of material which is as old as the Dharma-Sūtras of Gautama and Āpastamba (e.g. chapters on Rājadharma and punishments), but the bulk of it is based on Manu-Smŗiti, about 160 verses, and numerous Sūtras, which are merely prose translations of Manu's verses. In its present form, it may be even later than Yājñavalkya-Smŗiti from which it borrows.

Its Geography. Its geographical horizon shows it to be later than Manu. It defines \bar{A} ray \bar{a} varta in terms of culture, as the region marked by the four castes of Aryan society [84, 4] and locates holy places all over India. Thus \bar{A} ry \bar{a} varta or Aryan India was expanding before the retreating barbarians and was no longer confined to the region of the black antelope, as in Manu. It knows of the five rivers of the south (*Dak-shine panchanade*) [85, 51], and mentions \bar{S} riparvata, Sapt \bar{a} rsha (= Satara?) and God \bar{a} var \bar{i} .

Works mentioned. It knows the four Vedic Samhitäs, the Aitareya Brähmana [15, 45], the Vedängas [30, 3, etc.], Vyäkarana [83, 7], Itihäsa [3, 70, etc.], Puräna [*ib.*], and Dharma-Sästras [*ib.*].

Points of interest. Other points of interest are its mention of the seven days of the week and of Thursday as Jaiva; of the practice of Satī [25, 14]; of pustakas [18, 44; 23, 56]: of yellow-robed ascetics (probably Buddhists) and Kāpālikas [63, 36] and Sūdra ascetics [5, 114] as inauspicious sights; of special directions for the worship of Vāsudeva [ch. 49]; and its prohibition of speech with Mlechchhas, Antyajas [71, 59] and of journeys to Mlechchha countries [84, 2].

Polity. Vishnu's political system is that of Manu. There

is mention of lords of 10 and 100 villages under the ruler of the whole country ($des\bar{a}dhyaksha$) [3, 5]. The conquercr of a country should net uproot its customs and usages (taddesadharman nochchhindyet) and sheuld place on its throne a scion of the old royal family [3, 26, 30].

There is a reference to king's gift recorded on parchment (pata), or copper-plate $(t\bar{a}mra-patta)$, bearing the king's seal $(mudr\bar{a}nkita)$ [3, 53].

Coins. Vishnu's currency is more elaborate than Manu's. He mentions :

3 Yavas = 1 Krishņala.

5 Krshnalas = 1 Māsha.

12 Māshas = 1 Akshārdha.

1 Akshārdha + 4 Māshas (i.e. 16 Māshas) = 1 Suvarņa.

4 Suvamas = 1 Nishka.

In weight 2 Krishnalas = Rūpya-māshaka; 16 Krishnalas = 1 Dharana.

Yājñavalkya-Smriti. Yājñavalkya is a famous name in the Brāhmaņas and Upanishads. He is the promulgator of White Yajurveda. But he cannot be the author of the Smriti which is so modern in its style and doctrines, though it is closely connected with the White Yajurveda. According to Mitāksharā, a pupil of Yājñavalkya abridged the Dharma-Sāstra in the form of a dialogue.

Comparison with Manu. The work of Yājñavalkya is more systematic and abridged than that of Manu. It compresses the material of 27,000 vcrses of Manu into a little over 1,000 vcrses and yet includes in them some new subjects. These are: (1) worship of Vināyaka and the Grahas for propitiation [i, 271-308]; (2) detailed treatment of five kinds of ordcal {ii, 95-113} as against Manu's general reference to two [viii, 114]; (3) considerable anatomical and medical matter [iii, 75-108]. There are also points of difference between Manu and Yājñavalkya, showing that the latter represents more advanced and recent conditions. This may be illustrated us follows :

Manu allows a Brahmana to marry a Sūdra girl [iii, 13],

which Yājñavalkya condemns emphatically [i, 59]. Manu condemns Niyoga [ix, 59-68], but not Yājñavalkya [i, 68-9]. Manu is not explicit about the rights of inheritance of a widow, but Yājñavalkya places the widow at the head of all heirs and classifies heirs in a regular order. Manu cannot to'erate gambling [ix, 224-6]. Yājñavalkya brings it under State control and utilizes it as a source of revenue to the king [ii, 20-3]. Yājñavalkya is also more systematic and modern in his treatment of topics like (a) ordeals (b) proofs in courts [Manu completely ignoring documentary evidence, though he knew documents (viii, 51, 2)], (c) rules of procedure in ccurts [Manu, viii, 53-6, and Yāj., ii, 5-11 and 16-21], and (d) the doctrine of possession and prescription [Manu, ix, 44, 54, and Yāj., ii, 24-9].

Some references. Yājňavalkya speaks of yellow-robed people as evil sights [i, 273], meaning the Buddhists, because he himself prescribes yellow robes $(k\bar{a}sh\bar{a}ya)$ for his seeker after salvation (iii, 187]. He also refers to the monasteries of Brāhmaņas learned in the Vedas [ii, 185].

Literature known. As regards learning, Yājñavalkya refers to the four Vedas, six Vedāngas and fourteen Vidyās, including Purāņa, Nyāya, Mīmāmsā, and Dharma-Sāstra; to Āraņyakas [i, 145] and Upanishads [iii, 189]; to Itihāsas, Purāņa, Vākovākya and Nārāśamsīgāthās [i, 45]. But all these subjects of study are as cld as the Upanishads. He also mentions Ānvīkshikī (Metaphysics) and Dandanīti [i, 311], Smritis in general [ii, 5, and i, 154], and Sūtras and Bhāshyas [iii, 189]. He lays down the dictum that where Dharmaśāstra and Arthaśāstra conflict, the former is to be followed [ii, 21].

Corporations. Lastly, though Yājñavalkya is silent about polity and administration, he mentions a crop of corporations standing for popular government in different spheres of national interests. The Village Community is called a Samüha, of which the executive officers are called $K\bar{a}rya$ -chintak $\bar{a}h$, men who are learned in law, pure in character, and free from greed [ii, 191]. Embezzlement of the profits earned by an executive officer for the Samūha is punished by a fine eleven times the amount embezzled [ii, 190]. The term for a republic is Gana [ii, 187]. Its constitution is called *Sainvit*, the violation of which is punished with deportation [ii, 187]. The self-governing groups in an ascending order are called *Kula* (clan). *Jāti* (caste), *Śreņī* (guild), *Gaņa* (village community as a whole), and *Janapada* (province), each of which laid down its own laws which the king was to respect, uphold, and enforce [i, 361]. The *Kula* and *Śreņī* also functioned as courts of justice, the former lower than the latter, while the yet higher court was the *Pūga*. The *Śreņī* was the assembly composed of men of different castes but following a common craft, but the *Pūga* represented all castes and crafts of the locality, and, therefore, carried the highest authority [ii, 30]. Appeals lay from the lower to the higher court.

Mithilā. It is also to be noted that while Manu legislated primarily for Brahmarshidośa, Yājñavalkya is associated with Mithilā [i, 2], the Vedic Videha of Janaka-Yājñavalkya fame.

Nārada-Smriti : Comparison with Manu and Yūjñavalkva. It follows Manu-Smrili in the nomenclature and arrangement of the eighteen titles of law. There are about lifty verses common to both, and others containing the same matter. But Nārada has several new points showing his differences from Manu, as well as Yājñavalkya; e.g. his mention and description of five different ordeals as against two of Manu (viii, 114), to which he adds two more [ch. on Rinādāna, verses 259-3481 not known to Yājňavalkya. Against Manu he allows Nivoga (marital relation, 80-8) and re-marriage of women [ib, 97]. He mentions fifteen kinds of slaves against seven known to Manu. Like Yājñavalkya, he allows gambling under State control, and as a source of revenue, and does not interdict it like Manu. He has in fact more of system. of divisions. and subdivisions, than Manu; e.g. his division of law of gift into four sections subdivided into 32, and of 18 titles into 132. He is also later than Yājñavalkya, as shown in his rules of judicial procedure which are more systematic and exhaustive. or in his giving more definitions, or new matter like the seven kinds of ordeals. But in some respects he is more conservative than Yājñavalkya. Unlike Yājñavalkya, he docs not recognize the right of widow to succeed to her deceased husband. nor does he mention any rules of succession for gotrajas and bandhus, as Yājñavalkva does.

Some new positions. Nārada also lays down certain new principles of law and ethics, e.g. that every man's house is his castle (Rinādāna, 32) or that the king, however devoid of virtue, must be worshipped by the people, as the husband by his wife (*prakīruaka*, 20-2).

Coins. Nărada mentions the word *Dināra* twice, first as a golden ornament, and, secondly, as a coin, also known as *Savarņa*. This helps to fix his date. Golden *Dināras* were first coined in Rome in 207 B.C. and the oldest pieces corresponding in weight to the Roman *denarius* were struck in India by the Indo-Scythian or Kushan kings reigning from first century B.C. This should place Nārada somewhere between, say, A.D. 100-300.

Home of Nārada. It is difficult to locate the home of Nārada. In one place he says that the silver Kārshāpaņa was current in the south, that it is equivalent to 20 *paņas* in the east, and he does not follow the standard of Kārshāpaņa obtaining in the land of five rivers [Chaurya-pratishedha-prakaraņa, 57 and 59].

Apprenticeship. To Nārada we owe the rules relating to Apprenticeship and Partnership. The young industrial apprentice must first get the consent of his guardians and period of pupilage settled before admission by his master. He must live with his master whose home is his workshop and is to be treated and instructed as his son. He is not to be exploited and employed on work not connected with the craft of his choice. He cannot leave his master before his term, even if he has completed his training, the profits of which will go to the master. Desertion of a master not failing in character, or as a teacher, is severely punished by confinement or corporal punishment. At the end of pupilage, the apprentice must reward his master as best as he can or may accept his service 'under terms settled [v, 16-21]. It was this industrial training that was so successful in giving to ancient India the palm in handicrafts, feeding her rich export trade for centuries from Pliny to Tavernier.

Partnership. Industry was carried on by partnerships. The loss, expense, and profits of business were in proportion

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to the share taken in it. A partner was liable for his individual action and could appropriate its special profits [iii, 1-6].

Corporations. Narada also mentions self-governing Corporations such as Kula, Sreni, Gana [i, 7], Puga, Vrata, and guilds of Pashandas (heretical merchants) and Naigamas (followers of Vedas) [x, 2]. Each of these Corporations rests on a convention or constitution called Sthiti or Samaya which must be obeyed by its members and upheld by the king |x, 1-2]. According to the Vyavahāra-Mayūkha, the term Vrāta stands for an association (Samūha) of kinsmen. connections. or cognates, i.e. a Kula; the Püga, for an association of persons of different castes and crafts: and the Gana, for a federation of all these associations, which is thus the largest aggregate in the series and comprised the whole village republic. The Kula, Sreni, and Gana also functioned as courts of law subordinate to the king's Court, and to the king himself as the final Court of Appeal [i, 7]. Thus quite a large field of government was left to the people in the villages in these different associations of group-life.

(End of Part one)



THE AUTHOR

Noted historian and politician, Dr. Radha Kumud Mookerji, M.P., M.A., Ph.D., D.Litt., F.A.S.B., started life as Professor of History in the Bengal National College, under the Principalship of the late Sri Aurobindo. Subsequently he joined the Mysore University where he was Professor of History from 1917 to 1921. Thereafter he became Professor and Head of the Department of History in the Lucknow University and remained there for an unbroken period of twenty-five years. Presently he continues to be Emeritus Professor of History of the same University where his friends have endowed a Lectureship in his name.

On the political side, he had served as a Member of the Bengal Legislative Council for six years (1937-43) and had been a Member of the Floud Commission for a year and a half in 1939-40. In 1946-47, he was appointed a Member of the Indian Delegation to the F.A.O. Preparatory Commission at Washington and was nominated by India's President as a Member of the Council of States for the period 1952-58. The President has also conferred o Padmabhushana.

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