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INDIA AND THE PACIFIC WORLD.

INDIA

AND

THE PACIFIC WORLD

KALIDAS NAG, M.A. (Cal.), D.Litt. (Paris)

Honorary Trustee, Pan-Pacific Union; Visiting Professor, Oriental Institute, University of Hawaii and of the Institute of International Education, New York; Chairman, Calcutta Branch, Indian Institute of International Affairs; Historical and Archæological Secretary, Royal Asiatic Society of Bengal; Founder-Secretary, Greater India Society, Calcutta.

Sole Distributors:

UNITED ASIA PUBLICATIONS

BOMBAY

BOOK COMPANY LTD.

College Square, Calcutta, India

1941

Published under the auspices of the Greater India Society by Girindranath Mitra, of Book Company Ltd., 4/3B, College Square, Calcutta.

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Foreign £1/5 or 6 dollars
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Printed by R. C. Roy Choudhury, Prabasi Press, 120/2, Upper Circular Road, Calcutta.

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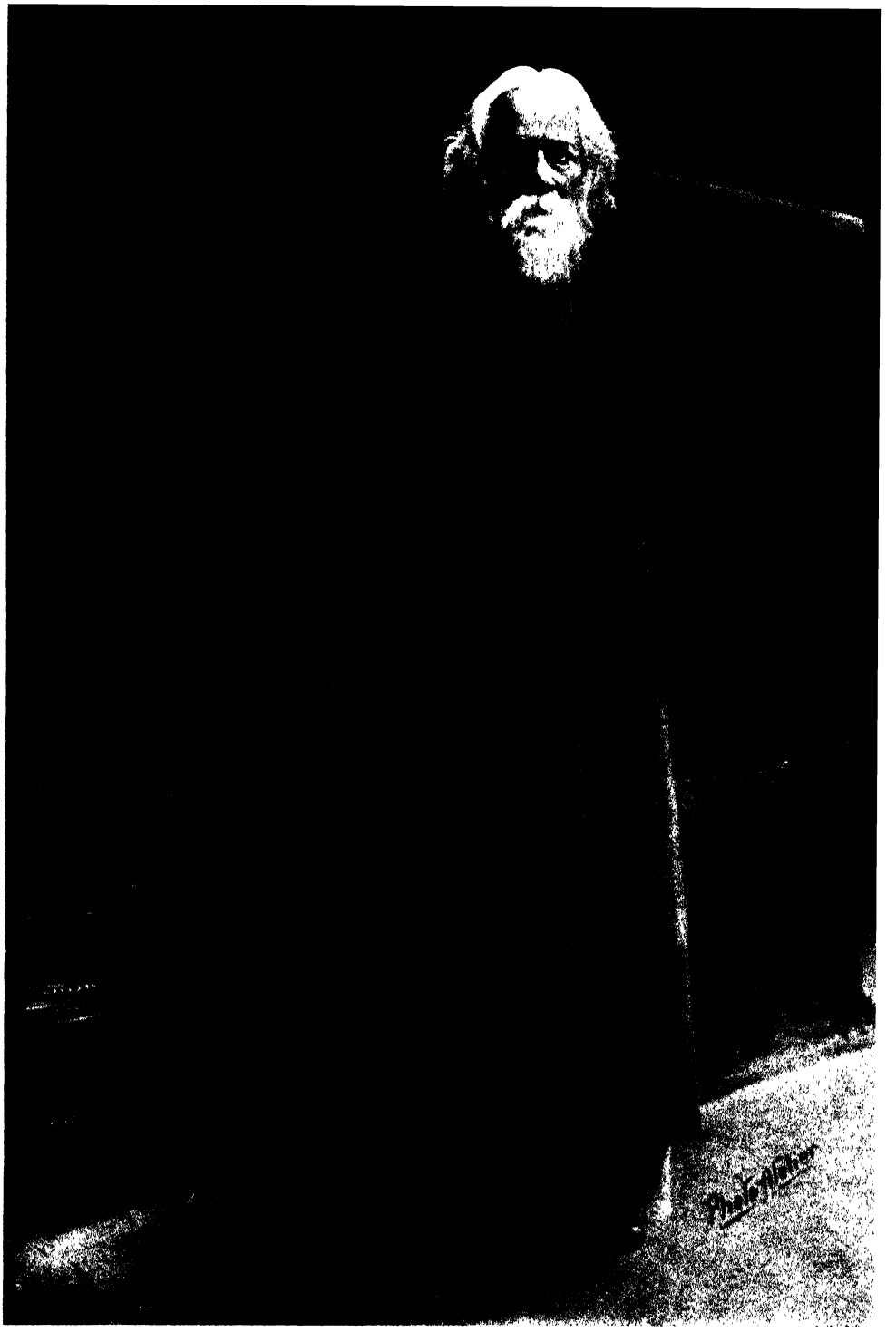

Prabasi Press

RABINDRANATH TAGORE

This is probably the last standing pose, given by the poet in March, 1941.

DEDICATION

To RABINDRANATH TAGORE,

Master-Builder of the *Viśva-Bhāratī*

Purodhā, Bṛhattara Bhārata Parishad. (Greater India Society).

Poet-Pioneer of the *New Orient* and of the *New World Order*,

With profound gratitude.

8th May, 1941. K. N.

FOREWORD

THE Indian schoolboy of to-day is more fortunate than ourselves when at school. Our text-books of Indian history, even when written by our own countrymen in our own mother-tongue, did not then give us any historical information relating to India earlier than the invasion of a corner of the Panjab by Alexander the Macedonian. Even when we were in the high school or at college, our text-books did not tell us anything about the republics which existed in ancient India and the spread of Indian civilization and culture in Further India, Indonesia, China, Japan and the Philippines. And, of course, the text-books which we read at school or college could not tell us anything about any pre-historic culture or civilization in India. For it was only when we were already almost on the wrong side of sixty that Rakhal Das Banerji discerned and made known the real character and significance of the seals and other objects which he dug out at Mohen-jo-Daro or Daya Ram Sahni revealed the secret of the finds at Harappa excavated by him.

Now even school children can learn something about all these things from their text-books in the mother-tongue.

But the real position of India in ancient pre-historic and proto-historic times, with the world—particularly with Asia and America, as the background, has still to be perceived even by scholars.

In English books on ancient culture and civilization the Atlantic civilization still occupies the foreground of the picture. There we read of the Mediterranean culture and the Cretan culture also. But the cultures which grew up in Oceania and Polynesia and generally in countries washed by the Pacific Ocean and which most probably influenced the aboriginal American cultures, are not yet adequately recognized. Still less recognized is India's part in the bringing about of inter-continental contacts and the fusion, to a greater or less extent, of cultures separated by oceans as regards their places of origin.

Scholars and students all over the world require to study the subject of inter-racial and inter-continental cultural contacts in order to fully realize human unity. This study requires as its condition precedent wide travel-study, or at least, as its substitute, a know-

ledge of the cultural material garnered in the Museums of the world. The author of this book has tried in his career to fulfil both parts of this condition, as the present work and its predecessor, *Art and Archaeology Abroad,* amply show. The inspiration for his travels and studies, as also part of the necessary assistance, he owed to Rabindranath Tagore. He acknowledges this debt of gratitude to the great Poet, who was in life and will continue for all time to come to be the bridge between peoples and races, countries and continents. I share his grief that he could not place a copy of the book in the hands of the Poet. If that cherished desire of the author had been fulfilled, I am sure he would have received the affectionate blessings of that Great Unifier of Peoples for producing such a valuable and useful work with so much earnestness and labour.

RAMANANDA CHATTERJEE.

8th September, 1941.
Calcutta.

INTRODUCTION

THE Pacific Ocean in our early school days was made to appear too far away to have any relations with India and too vague and vast for seeking human relationship. Books of geography were mostly manufactured in the countries bordering on the Atlantic and therefore we find in them a pardonable exaggeration of the importance of the Atlantic civilization. What was unpardonable however was the indifference and ignorance, betrayed by the general group of writers, regarding the history of the Pacific countries and their cultures. The beauty and diversity of the Pacific World have been depicted, no doubt, by a few eminent writers but they have failed so far to take the average readers to the heart of the Pacific life and society, beyond the queer exotism and the romantic haze emanating from the film-studios.

Yet the Pacific was a grand depository of cultural treasures and a vast reservoir of historical traditions. Sailing in 1924 with Dr. Rabindranath Tagore into the Western Pacific, I was blessed by the Master Poet in my endeavour to trace the cultural and artistic relations of India with the nations of the Far East: China and Japan Java and Bali, Champa and Cambodge, Malaya and Burma offered to me a thousand points of historical contact and cultural relations which I tried to present to our countrymen through the Greater India Society (1926). The Society grew under the fostering care and scientific attention of my esteemed colleagues Dr. R. C. Majumdar, Mr. O. C. Gangoly, Dr. Suniti Kumar Chatterji, Dr. U. N. Ghoshal, Dr. Probodh Chandra Bagchi, Dr. Bijan Raj Chatterjee, Dr. N. P. Chakravarty, Dr. Nihar Ranjan Ray, Dr. B. K. Ghosh, Mr. D. P. Ghosh and others. The growth of public interest in Greater India became manifest through the lecture invitations accorded to me by the following Universities : Madras, Mysore, Andhra, Patna, Benares, Allahabad, Nagpur, Bombay, Osmania (Hyderabad), Gurukul (Kangri), Punjab, etc. There were also calls for lectures from Srinagar and Jammu, Baroda and Patiala, Poona and Dharwar, Bhor and Cochin, Manipur, Assam and Orissa. Everywhere I encountered a genuine curiosity and ardent enthusiasm amongst my countrymen, for which I am deeply

grateful. In 1930-31, invitations came from the League of Nations, Geneva and from the Institute of International Education, New York. Under the auspices of the latter Institute I was privileged to lecture on the various aspects of the Greater Indian Civilization in relation to the Pacific World at the Universities of Harvard, Yale, Columbia, Pennsylvania, Chicago, Evenston (North-Western), Pittsburg, Virginia, Berkeley, Los Angeles, Oregon, Montana, Minnesota, as well as in some of the leading Museums and learned societies of the U. S. A. From the admirable collections and publications which I examined there I came to realise what grand contributions to Pacific studies have been made by American scholars like Boas and Dixon, Kroeber and Handy. My friendly collaboration with the American scholars continued down to 1937-38, when I had the privilege of serving the University of Hawaii as its Visiting Professor and the University of the Philippines as its Guest-lecturer. Invited to the World Writers' (P. E. N.) Congress (1936) of Buenos Aires I had the good fortune to gather some information with regard to the cultural institutes of Latin America and of the Eastern Pacific. In 1938, I had the honour of attending, as a member-delegate of the Indian Institute of International Affairs, the British Commonwealth Relations Conference of Sydney, and thence I was privileged to visit the leading Universities and Research Centres of Australia and New Zealand. On my way back to India, I re-visited Indo-China, Siam and Malaya and was amazed to find that everywhere there was a healthy emulation in extending our knowledge from the known historical periods to the proto-historic and pre-historic epochs. The three Congresses of the Pre-historians of the Far East, held at Hanoi, Manila and Singapore, contributed largely to the development of our interest in the Early Man in Asia. That problem was partially tackled in the admirable volume *Early Man*, published on the occasion of the 125th Anniversary of the Academy of Natural Sciences of Philadelphia (1812-1937). Soon after, the Sixth Pacific Science Congress at Berkeley, California, arranged for another symposium on *Early Man in Asia and the Pacific Regions.* My esteemed friend Dr. B. S. Guha was invited to contribute to the discussions at Berkeley in 1939, while I had the honour of being invited to participate, as a member-delegate, in the International Congress of Anthropology and Pre-historic Archæology, at Istanbul (Sept., 1939). My notes on " India in Asiatic Pre-history " were

ready for the Congress and I was about to sail for Turkey when alas! our programme was completely upset by the outbreak of the war. Normal exchange of notes and publications with my learned colleagues outside India came to be rudely interrupted. So I lost the chance of strengthening my observations in the various chapters by exact quotations from authorities. An exhaustive Bibliography and systematic Index had also to be postponed till the publication of a new edition with the dawning of better days. Thanks, however, to the generous co-operation of my colleagues of the Royal Asiatic Society of Bengal and specially its Honorary Secretary, Dr. B. S. Guha, engaged in reorganizing its valuable library, I could manage to complete a tolerable press copy of this book in the course of the anxious months of the first year of the war.

From the beginning, I entertained the hope that I shall be able to supply pictorial documents to illustrate the important objects of art and archæology discussed in the various chapters. But unfortunately the chances of securing photographs, etc., from my friends abroad, appeared to be very remote; and in the second year of the war, the cost of paper and of the printing of blocks became so exorbitant that, with the utmost reluctance, I had to give up the project of illustration for the present. I hope, however, that with the end of the war and with the return of the printing business to normal conditions, I shall be able to offer to my readers a separate volume of photographic documents illustrating satisfactorily "India and the Pacific World." Ever since the publication of my "Art and Archæology Abroad" (1936) for which I am thankful to my Alma Mater, the University of Calcutta, I have received many appeals from my friends and students to publish an illustrated volume, along the same lines, on the Asiatic countries specially connected with Indian cultural traditions. On my way to and from Australasia, in 1938, I still thought of compressing my notes and discussions into a smaller volume with the title "Monuments and Museums of the Far East." But surveying the vast Pacific, as I had the privilege to do, from different points of the compass, I felt that the monumental and the artistic materials must be correlated with their anthropological and pre-historic contexts. To trace the history of the Far Eastern civilization, from the age of the Peking Man and the Java Man to the age of the modern antiquarians classifying the materials in the Museums of Peking and Batavia, was no doubt a risky venture.

But I was forced to take to that path because of the paucity of any handy volume which alone may have the chance of attracting the rising generation of scholars to the study of the unexplored Pacific. I am conscious, more than anybody else, of the insufficiency of presentation in this volume. I hope, however, that my defects would serve as stepping-stones for future and worthier researchers in this field. I had neither the resources nor the repose to delineate the history of Man in Asia as a harmonious series of frescoes; my hurried chapters reflect rather a pathetic attempt to work the diverse materials and interpretations thereon into some sort of a mosaic of the pavement, for passers-by to tread upon, ponder for a while and then to go forward.

Thirty years ago, the author was blessed by the Master Poet of Asia, Dr. Rabindranath Tagore, with the vision of the Unity of Man in History. His sublime vision and inspiration have throughout sustained me in my work, and my gratitude is infinite. He linked my humble life with the lives of many dreamers of world harmony and many noble workers for World Order. On the eve of his 80th birthday, when I had the privilege of saluting him while dedicating this volume, I felt that, even amidst the savage destruction of civilization by modern man, Tagore did not lose his faith in Man and in the Future. Returning to Calcutta from Santiniketan and sending my manuscript to the press I never suspected that the Master would not be here to receive the printed volume. I dedicate it to him in agonized silence, listening to the ineffable melody of his deathless *Gītānjali* :

" Thou hast made me known to friends I knew not
Thou hast given me seats in homes not my own,
Thou hast brought the distant near,
And made a brother of the stranger."

Kata ajānāré jānāilé tumi
Kata gharé dilé thāin
Dūrke karilé nikat bandhu
Parké karilé bhāi.

While the book was going through the press, there was a setback in my health and I remember thankfully the kind help rendered by my esteemed colleagues of the University and by my beloved pupils, who spared no pains to make the book as presentable under the circumstances as possible. Among others I remember with

gratitude the services of my old friend Prof. Dr. Suniti Kumar Chatterji, who, amidst his multifarious duties, insisted, like a true lover of Oriental art that he is, to correct all the proof-sheets with his usual thoroughness. Next I must thank my pupil Mr. Balai C. Basu M.A., who with an exemplary devotion prepared the press-copy of the entire book as well as the Index.

Space does not permit me to mention by name all the noble friends and learned institutions in India and abroad, who have helped me with their publications and suggestions, and I offer to all my sincere gratitude through this humble volume.

I am grateful to the learned Editors of *The Modern Review*, of the *Calcutta Review*, of the *Maha Bodhi Journal*, of the *Indian Historical Quarterly*, and of the *Bulletin of the International Institute of Intellectual Co-operation*, for their kindness in printing some of the chapters of the book in their esteemed journals and for permitting me to reprint them in this volume.

I thank, in this connection, Sir B. L. Mitter, Advocate-General of the Federal Court, Sir M. Azizul Haque, Vice-Chancellor, Calcutta University, Sir P. C. Roy, President of the Greater India Society, and Sir Akbar Hydari of the Viceroy's Executive Council, for their generous interest in my work.

At every stage of my cultural mission I have had the privilege of being encouraged by our learned President of the Post-Graduate Council, Dr. Syama Prasad Mookerjee and I offer him my thanks.

For kindly arranging to invite the general public to participate in my courses on Indian and Asiatic culture, I am especially thankful to Swami Nityaswarupananda of the Ramakrishna Institute of Culture, to Devapriya Walisingha of the Maha Bodhi Society, to the Secretaries of the Y.M.C.A. and the Y.W.C.A. of Calcutta, to the organizers of the Vasanta Byākhyāna-mālā of Poona and of the Zoroastrian Cultural Courses of the Cama Institute, Bombay.

I am specially thankful to Mr. K. N. Chatterji, B.Sc. (Lond.), and his efficient staff of the *Prabasi Press* for their uniform courtesy and care in printing the volume. For the excellent map of the Indo-Pacific World, I beg to acknowledge my indebtedness to Dr. E. S. C. Handy and to the authorities of the Bishop Museum of Honolulu.

Post-Graduate Department, University of Calcutta.
The 17th of August, 1941.

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INDIA AND THE PACIFIC WORLD

CHAPTER I

THE PACIFIC BASIN—A CULTURAL SURVEY

WHILE surveying the progress of Art and Archæology in Europe and the Near East, in the United States and in Latin America in my previous book *Art and Archæology Abroad*, published by the University of Calcutta, (1936-37), I was naturally drawn to the immense and so far inadequately explored Pacific World. The end of the Middle Ages was significantly marked by the pioneer explorations of Portugal and Spain leading to the discovery or rediscovery of the so-called New World already peopled by the Oriental races. The Atlantic Ocean then served as the great highway of Atlantic commerce and culture. The pre-Columbian art and culture of the two Americas were ruthlessly destroyed in the name of Christian civilisation and their highly gifted races were drowned in the deluge of blood. A struggling and demoralised people, the American Indians still drag on a miserable existence, occasionally rousing anthropological curiosity or ecclesiastical charity. But the prevalence of the American Indians all along the Eastern shores of the Pacific, from Alaska to Mexico and from Peru to Patagonia, has only been indifferently studied so far with reference to the other cross-currents of races and cultures in Asia and in the vast Pacific Basin. Columbus, the first of the modern European navigators to touch the shores of South America, reached the Orinoco river in 1498 shortly after his discovery (1492) of the New World. He was followed by two eminent Portuguese explorers : Balboa discovered the Pacific at the Gulf of Panama (1513) and Magelhaes plunged into the Pacific (1520) passing through the Magellan Strait. The adventurers, chiefly Spanish and Portuguese, were attracted by the silver of the Andes and the rich mineral wealth of Potosi in Bolivia. In 1693 gold was found in Minas Geraes of Brazil. In 1729, diamonds also were discovered in the gold-bearing districts of Brazil, which was the largest producer of diamonds until the opening of the Kimberly fields of South Africa. Individual greed and imperialistic scramble of the Buccaneers and Conquistadores, always from across the Atlantic, super-imposed a new Atlantic Civilisation on the dead bones of the Pacific races. With the growth of anthropological and pre-historic studies in

the 19th century, Humanistic Science appeared in her new rôle as the mother of Charity, ever so much more understanding and disinterested than the Church-ridden charity of older days. The vast wreckage of pre-Columbian art and culture is now being collected and studied mainly by the American Universities and Museums and especially by the Bureau of Ethnology, Washington, the Haye Foundation of the American Indians and by the Museum of Natural History, New York.

Race Origins in the New World

The American scholars, generally speaking, suffer from the incubus of a sort of cultural Monroe Doctrine. That is why, till very recently, there prevailed among American anthropologists and antiquarians the idea that " the American cultures were of essentially or even wholly American development." Thanks, however, to the painstaking researches of eminent scientists like the late Prof. Dixon and specially Dr. Ales Hrdlicka, fresh light has been thrown on the problem, proving almost conclusively the importation of races and cultures from Asia. Since 1926, the Smithsonian Institution of Washington has carried on explorations and studies in Alaska under the direction of Dr. Hrdlicka and his colleagues and they have definitely come to the conclusion that the American Indian " is connected with the early neolithic men of Asia and through him with the Magdalenian and Aurignacian men of Asia and Europe." The cultural evidence of the explorations shows, according to Dr. Hrdlicka, that the men from Asia were coming over not as a people without a culture but already as carriers of well-advanced cultures of, in substance, the American type and from which further American developments, according to differing needs and opportunities, could readily have taken place in different locations.*

* Hrdlicka : *The coming of man from Asia in the light of recent discoveries.* (1936). " Up to very recently there prevailed among American scholars the notion that the American cultures were of essentially or even wholly American development. This would imply that the comers from Asia brought with them but a sort of undifferentiated simple culture on the basis of which the American development took place; or that if they brought any specializations, these are forgotten under the new environment. The answers to this from our excavations are that the farthest Northwest, in as far as we can reach, is culturally rich and varied; that the oldest of the cultures there discovered, namely, the fossil-ivory culture of northern Bering Sea and of the north-eastern Asiatic coasts, and the old culture of Kodiak Island, are not only the richest in forms that are the most beautiful as well as conventionalized, but that they come in full-fledged and that their outstanding features may be followed deep into the American Continent; while other cultural evidences are appearing that connect directly on one hand with the neolithic attainments of Asia and on the other hand with numerous elements in the cultures of the north-west coast and farther southward, in the Southwest, Mexico and even Central South America."

AMERICA AND THE INDO-POLYNESIAN WORLD

While admitting generally the migration of races and cultures from the extreme North-East Asia into America by the land route, occasionally supplemented by coastal navigation in skin boats, maritime cultural relations between Polynesia and pre-Columbian America are still being vigorously disputed. The solitary evidence of the sweet-potato exchanged between the two peoples appears to be unconvincing. Yet a veteran anthropologist like Dixon boldly broke through the barriers of such a cultural determinism and reopened the possibility of oceanic contacts so long disputed by the " isolationist " group of scholars. Dixon pointed out that " among such traits as blow guns, plank canoes, hammocks, lime-chewing, head-hunting cults, the man's house and certain masked dances common to the New World and the Pacific Islands, there appears the tendency to mass upon the Pacific side of the New World."

The Mid-Pacific and the South Pacific cultures also, when thoroughly studied on a comparative basis, would throw a new light on the development and migration of Polynesian civilization. The most important work in this field has been done by the devoted workers of the famous Bishop Museum of Honolulu, which I shall discuss in detail later on. Suffice it to say that this major institute of Polynesian research has largely explored as far as the Easter Island on the one hand and Fiji in the heart of Melanesia on the other, in order to explain as well as to co-ordinate the problems and facts of Pacific life and culture. So the progressive American University of Hawaii recently deputed Prof. Dr. J. Coulter to study the basic principles of land utilization in Hawaii, Somoa, New Zealand, Australia, Fiji, the Dutch East Indies as far as India. This promising new development in the scientific outlook tends to place the conclusions of cultural anthropology on the solid basis of Anthropo-geography opening up new and unsuspected avenues of research which some day would link up the so-called New and the Old worlds through Polynesia, Melanesia, Micronesia and Indonesia, right up to the Indian Ocean. However late may appear the penetration of the Pacific by the Indo-Polynesians, they are generally accepted to have come across the Indian Ocean and over the island bridges of Indonesia, Micronesia and Melanesia. This has been very effectively demonstrated by Dr. E. C. Handy, the learned Ethnographist of the Bishop Museum. Our late lamented colleague Dr. Panchanan Mitra also came to similar conclusions, sifting the evidences from the Indian and Indonesian side while working in the Polynesian field with his colleagues of the Bishop Museum.

Cultural Centres of the Pacific

Privileged to work for a while in the University of Hawaii, a major American cultural organisation in the very heart of the Pacific, I could gather from my learned colleagues information rarely available elsewhere. The youngest of the American universities is the one established in Alaska, which, thanks to the explorations of American scientists, now appears to be the main bridge enabling the Asiatic races to enter the New World. Prof. Bruce White of the Teacher's College, University of Hawaii, worked for some time as an exchange professor at the University of Alaska and from him I came to learn that the University co-operates with archæologists and anthropologists from outside. There are departments of agriculture, commerce, pedagogy, humanities, etc., and there are special arrangements for mining engineering with two months of intensive field-work in the rich mining zones of Alaska. U. S. A. got Alaska by purchase in 1869 from Russia and the Russians did not know then that some of the richest minerals like gold, copper, etc., would fall to the lot of their American successors.

But possibly the most precious treasures of historical value would be the relics and survivals of primitive man crossing from the Old to the New World. Already the Smithsonian Institution of Washington has discovered invaluable cultural links and Dr. Otto Geist of the University of Alaska has made extensive explorations in the St. Lawrence Islands of the Bering Sea. Several submerged pre-historic villages have been excavated, leading to the discovery of fossil bones, artifacts and other collections of paleontological and anthropological value which have been deposited in the Eilson Memorial Museum of the University of Alaska. Dr. Franz Boas, the doyen of American Anthropologists, published as early as 1888, his monograph on the Central Eskimo, published by the Bureau of Ethnology, Washington. In 1897, he published *The Decorative Art of the Indians of the North Pacific Coast* (Bulletin, American Museum of Natural History, Vol. IX). In 1900, the Alaska Historical Library and Museum was established at the capital, Janeau, and the collections include ores and natural products of Alaska, agricultural and fishing implements, utensils, weapons, boats, clothing, tools, basketry, carvings and historical materials of the Alaska Indians.

The Museum of the Sheldon Jackson School at Sitka was started in 1887 and goes on adding to its ethnological collection. So the Alaska Agricultural College of Mines offers 45,000 items of Eskimo materials for scientific investigation.

Turning diametrically to the opposite direction, from the North Pacific

to the South Pacific, we find numerous important centres of research in New Zealand and elsewhere, as I came to know from my esteemed friends Dr. A. D. Mead, Vice-President of the Brown University and Prof. Dr. Felix Keesing, who comes originally from New Zealand and is now permanently settled in Hawaii as the University Professor of Sociology. Two important research journals of the South Pacific are *The Journal of the Polynesian Society*, published from Wellington, and *Oceania* published from the Department of Anthropology, University of Sydney, Australia. The Maori culture of the natives of New Zealand, who are cousins of the Hawaiians, belonging to the same Polynesian family, although separated by thousands of miles of the watery waste, is being specially attended to by the New Zealand Government, which has established the Board of Maori Ethnological Research. It has rendered, so far, signal services to the cause of Maori arts and crafts and to the general advancement of the cause of the Maori people. Detailed information may be had from Mr. H. Balneavis, Secretary of the Board, Parliamentary Building, Wellington, N. Z. Rare exhibits of Maori wood carving, architecture, textiles and green stone implements are stored in the Auckland Museum, which has also been presented with the portraits of " tatooed " Maori chiefs. This " Lindaner collection " is of great ethnographic value. The Dominion Museum of Wellington also owns precious collections of Maori art, publishing bulletins and studies. The Christchurch Museum has a huge collection of Maori materials which for lack of space and funds could not be adequately displayed or studied. The University of New Zealand suffers from lack of co-ordination owing to the situation of its component units widely separated as at Auckland, Wellington, Christchurch and Dunedin. The Dominion Museum of Wellington, the Canterbury Museum of Christchurch, the Auckland Museum, Auckland and the Otago Museum of Dunedin are doing valuable work. Their experts of the departments of anthropology and natural history will gladly exchange publications, information, etc., with the scholars of India and other countries of the Middle East. While attending the World Writer's Congress (P. E. N.) at Buenos Aires (1936), and the British Commonwealth Relations Conference of 1938 at Sydney, I met Mr. Johannes C. Andersen of the Turnbull Library, Wellington, who has published a valuable book on Maori legends and is deeply interested in Indian folklore.

I had also the privilege of meeting in Honolulu Prof. Norman B. Tindale of the University of Adelaide who demonstrated keen interest in Anthropological studies in India, for he came into personal touch with the Afghans who entered Australia a few decades ago. Prof. Tindale has the rare experience

of tramping with the migratory primitive races of Central Australia almost on the verge of extinction. I came to know also from Mr. H. Duncan Hall of the League of Nations that the University of Sydney may offer many facilities of intellectual co-operation with India. Dr. A. P. Elkin, Professor of Anthropology and Editor of the *Oceania*, would gladly exchange notes with Indian scholars. The Mitchell Library and Museum of Sydney has an important collection of materials on the Australian aborigines. The Institute of Anatomy in Canberra, Federal Central Territory, offers a first class collection of skeletal remains. The National Museum of Melbourne, Victoria, owns huge specimens of anthropology and natural history. The Tasmanian aboriginal culture is well represented in the Hobart Museum. The Museum of Adelaide is the finest in Australia from the point of view of scientific display. Dr. Donald Thompson, Anthropologist of Melbourne, is interested in tracing the Australian aboriginals to their forebears the Dravidians (not Africans), who, he thinks, migrated to Australia through New Guinea and Papua. Recently there is a hopeful tendency to develop departments of Oriental (mainly Japanese and Chinese) studies in the Universities of Sydney and Melbourne. Prof. G. S. Brown of the University of Melbourne and Dr. A. L. Sadler, Professor of Oriental History, University of Sydney, Prof. W. Sewell of the University of Auckland, and Dr. C. Beeby of the University of Wellington, are deeply sympathetic to the cause of cultural co-operation between India and Australasia.

Prof. Felix Keesing and Mrs. Keesing, both passionately devoted to sociology, came all the way from South Pacific to the heart of Indonesia, in course of their scientific mission to the Philippines. On the way, Prof. Keesing stopped in the island of Fiji, where he found important collections at the Museum of Suva in the very midst of Melanesia, through which zone, according to some anthropologists, the Polynesians came from the Malayan World to Hawaii. In the island of Formosa, now under Japan, valuable scientific surveys of the aboriginal tribes have been made by Japanese scholars and there is an important collection in the Taihoku Museum, Formosa.

Lastly, we should notice the valuable anthropological collections of the University of the Philippines under Prof. H. Otley Beyer, (as I found during my lecture-tour of 1938), who is a varitable encyclopædia of the primitive lore of the Philippine races. It is now beyond doubt that, for ages, the Philippine archipelago had received ethnic and cultural elements from India, and yet, very unfortunately, no systematic study has been undertaken, from one side or the other, to reconstruct those forgotten chapters of Asiatic history.

American Centres of Oriental and Pacific Culture

While the majority of American anthropologists and archæologists are still, generally speaking, isolationists in their explanation of American cultural origins, a few outstanding scholars, however, like Dixon, Hrdlicka, Handy and others have produced valuable evidences demonstrating intrusions from or exchanges with the Asiatic mainland and the Pacific islands. Dr. Clark Wissler, Curator of Anthropology in the American Museum of Natural History, New York, and sometime Chairman of the Committee on Pan-American Co-operation of the American Association of Museums, is equally respected by both the wings, holding different hypotheses with regard to the origin and development of American civilisation. In his authoritative summary of the problems given in the *American Indian*, he leans more on the side of conservatism than on that of radicalism; and so much the more significant, therefore, is his admission of the claims of the Oriental and the Pacific races as direct or indirect progenitors of American Culture. We recommend to students, in this connection, his chapters on "New World Origins," "Chronology of Cultures," "Special Inventions," "Somatic Classification," "Archæological Classification," etc., as of special value. While keeping intact his scientific detachment, Dr. Wissler could not help expressing spontaneously his regrets, towards the end of the book, at the sudden and ruthless destruction of the splendid culture of the American Indians : "As to what a few more thousand years of freedom would have done for the New World, we can but speculate, for in the 16th century a calamity befell the New World, the like of which has no exact parallel in history. A militant civilisation from without, fired by a zeal not only to plunder the material resources of mankind but to seize the very souls of men in the name of God, fell upon the two great centres of aboriginal culture like a thunderbolt from a clear sky. The blow was mortal. But the man of the New World went down fighting and though his feeble survivors still keep up the struggle in a few distant outposts, the first great onslaught that annihilated the Aztec and the Inca marks the end of our story."

To convey adequately the significance of the glory and tragedy of that civilisation, one has got to write independent volumes. Here, in passing, we can give but a rough and ready inventory of its cultural relics in the leading museums and learned societies of the two Americas, hoping that it would help our students and scholars to establish cultural exchange with those institutions.

Latin America

While it is easier and more common to divide the cultural institutions into North American and South American, we think it better to follow the trend of history and linguistics by taking Mexico and other Central American cultural zones into the main body of the South American States, all organically connected and using two *Latin* tongues (Spanish and Portuguese) as against *English* used in the United States and Canada. Unfortunately for us, while the archæological and museum movements in Mexico are fairly strong, those in South America are as yet far from being satisfactory. It was with some difficulty therefore that I managed, during my trip through South America in 1936, to collect some information on the subject which I condensed in the last chapter of my *Art and Archæology Abroad.* We are thankful to the learned director and scholars of the American Association of Museums for the valuable information which they have furnished us systematically through their *Museum News* bulletin and through their handbook of *Museums in South America.* We find therein about 100 museums, 11 Botanical gardens, 11 Zoological gardens, and 2 Aquariums.

Two-thirds of all the South American Museums, including 26 principal ones, are to be found in the ten capital cities of the Continent and only one-third, including 9 of the principal museums, are to be found elsewhere. Out of a total of 100 museums, 22 are devoted to natural history, 7 to archæology or ethnology, 18 to history, 14 to art, 6 to commerce or agriculture, 4 to school service, 17 to natural history and anthropology and about 12 to general subjects.

The oldest museum in South America is the National Museum at Rio de Janeiro, established in 1818. In 1823, the National Museum of Natural History was founded at Buenos Aires. Sao Paulo, the richest state of Brazil, gives $40,000 to its museum. The grants from the Government and the public range from 5,000 to 25,000 dollars and some of the provincial museums attract from 100,000 to 150,000 visitors a year, the highest record, 250,000, being reached by the Colonial and Historical Museum at Lujan (Argentina). The Museums of the Argentine Republic demonstrate keen interest in archæology and ethnology, the richest collection being that of La Plata, which I have already described in my *Art and Archæology Abroad* (pp. 114-15). The Museum of Tucuman, located in the interior, continues to publish valuable monographs, as I came to gather from Dr. Alfred Metraux (now at the Bishop Museum, Honolulu), who served there for a while. The Museum of La Plata, growing out of the expeditions

(1872-1880) of Dr. F. P. Moreno, was made over to the Government and draws about $42,000 a year, working in close co-peration with the University of La Plata. Specially important are its materials of South American anthropology and paleontology. The National Museum of Fine Arts, Buenos Aires, shows the respectable budget of $48,000. The University of Buenos Aires owns a special ethnographic museum where the classes meet and I had the satisfaction of obsrving there not only the collection relating to the ethnography of South America but that of North America, Africa and some other Oriental countries.

The National Museum of Brazil at Rio de Janeiro is one of the most important museums of South America, notably for its research, explorations, publications and educational works. It was founded by Emperor Don Joan VI in 1818 and its library now contains about 50,000 books and pamphlets. Specially rich as it is in its collections of the geology, paleontology and ethnography of Brazil, the museum tries to supply the comparative view-point through its modest collection from Greece and Egypt as well as its specimens of general anthropology. The museum is supported entirely by the Federal Government, which grants about $142,000 annually. The Museum of Sao Paulo (Museu Ypiranga) is another important museum specialising in Botany, Zoology, History and Ethnology.

The most progressive of Latin American Republics is Mexico, which is divided into 28 States with a population of a little over 16 millions, linked with the rest of Hispanic America by the cultural tie of the Spanish language. I had the privilege of meeting at the P. E. N. Congress of Buenos Aires as a fellow delegate Dr. A. Reyes, the Mexican Ambassador. I gathered from him that the archæological and artistic studies of Mexico are under its department of Education. Mexico holds a proud record of maintaining about 75 museums, with the West Indies. Revival of the study of antiquities has led happily to a veritable renaissance in the arts and crafts of Mexico and we may expect similar result in other States of Central and South America. Peru, that stronghold of Inca civilisation, has several museums, the most important being the museum of Peruvian archæology at Lima. The building is designed in the spirit of pre-Incan architecture and although its most precious collection is in the domain of ceramics (the potteries are carefully arranged like books in library stacks for easy reference), there are also valuable collections of precious stones, metal, wood, shell objects as well as textiles. The museum gets about $35,000 from the Government. The University of Cuzco purchased in 1919, a private collection of ceramics and stone objects paying about $12,000. This forms the nucleus of the archæo-

logical museum of the University. So the University of San Marcos is proud to own its special museum of archæology with the cultural relics of the Incan and pre-Incan peoples, their potteries, textiles, mummies, etc., that are used for instruction and research.

The small State of Uruguay, population 2,093,331, grants about $5,000 to its Historical Museum, $10,000 to its Museum of Fine Arts, and $1,600 to its pedagogical museum, all located in its capital city, Montevideo. Its museum of natural history shows a modest yet valuable collection.

Of the smaller States, we may notice the National Museum of Colombia (named after Columbus, the discoverer of America) and the Museo Boliviano (with its section on archæology and natural history) founded in Caracas (Venezuela) in memory of Simon Bolivar, the liberator of Latin America. The National Museum of Chile was founded in 1830. It specialises in Natural History and Ethnography, and researches are undertaken in the field of Anthropology.

Thus we see that Latin America from Mexico to Chile is trying to develop its museums of natural history and anthropology, which, on closer inspection, might yield valuable links in a systematic study of the civilization of the Pacific Basin. Compared with the U. S. A., the politics of Latin America is precarious and her finances slender. Moreover, the greater part of the United States of Brazil remains so far unexplored. Yet I felt after my personal contact with the scholars and learned societies of that part of the world, that Latin America is a land of enormous possibilities.

North America—Canada

Vancouver, with a population of 117,217 only, maintains its City Museum (established in 1890) receiving 7,500 dollars a year from the City and membership, as operating income. Its special fields are natural history, anthropology and history of Canada.

Victoria with its population of 38,727, established in 1886 its Museum of Natural History with an operating income of $4,860 a year. It specialises in the natural history and ethnology of British Columbia.

The New Brunswick Museum of Natural History, St. John, which originated in 1862, was presented with a new building in 1934 costing over $400,000. The provincial Museum of Nova Scotia derives an income of about 5,000 dollars a year. It specialises in natural history. The National Gallery of Canada at Ottawa has a purchase income of $100,000 a year from the Dominion. The Art Gallery of Toronto was opened in 1916 and

spent in buildings alone $465,000. It has an operating income of $56,000 a year. The Royal Ontario Museum was opened in 1914. It spent $400,000 on the first unit of the buildings. Additions and alterations to the buildings since 1932 cost $20,00,000. $50,000 are spent annually for purchases and the operating income is supplied equally by the province and the University of Toronto. The Museum takes special interest in Natural Science and Archæology. It acquired the valuable collection of Chinese art and archæology from Bishop White, who selected things with the rare judgment of an expert and so the collection is important both from archæological and artistic points of view. The Art Association of Montreal, Quebec (founded in 1860) was opened in 1912 with $5,33,000 as building expenses and its operating income is over $26,000. It has a decent collection of Chinese and Japanese materials. Lastly, we draw the attention of our readers to one of the most progressive institutions of Canada, the McGill University. It started the nucleus of a Museum in 1882 with a collection on paleontology, geology and natural sciences. In 1892, it added the Library Museum with valuable documents on the history of writing and printing. In 1907, it developed its Architectural Collection. In 1926, it established its Ethnological Museum embracing the Eskimos, the Indians of the Pacific Coast, Plains, Eastern Woodlands and Middle West, the aborigines of Mexico, of South America, of Africa and of the South Sea Islands. A specially rich collection of books of the Ming period and other Chinese works numbering about 80,000 is now deposited in the McGill University. The collection was originally made by G. M. Gest, who founded the Gest Chinese Research Library now incorporated with the University.

U. S. A. Collections

The oldest museum in U. S. A. was established at Charleston, South Carolina in 1773, which was thoroughly reorganised in 1915 as the Charleston Museum. Among its important collections of natural history, we find primitive handicrafts, textiles and other materials of the South Carolina Indians. There are also casts and originals of Egyptian, Assyrian and Greek sculptures.

In New York, there are several anthropological collections of outstanding importance. The Brooklyn Institute of Arts and Sciences, established in 1823, developed its museum in 1889. We find here ethnological materials of the American Indian, Chinese, Japanese and Siamese; also

Far Eastern as well as Near Eastern ceramics, jewelery, lacquers, textiles, etc. The operating income of the Museum is about 250,000 dollars and the city of Brooklyn was authorised to expend to the limit of 600,000 dollars for buildings.

The special foundation for the collection and study of the American Indians originated with the collections, began in 1903 by George G. Heye with the funds furnished by Archer M. Huntington. Established in 1916, the Museum of the American Indian (Heye Foundation) was opened to the public in 1922. The cost of buildings alone came to 550,000 dollars and the principal of the endowment amounted to 785,000 in 1931. Its ethnological specimens include clothing, textiles, weapons, basketry, pottery, domestic and agricultural implements, toys, art-objects, musical instruments, leather work and miniature groups showing home life and ceremonial observances of some of the tribes. Its archæological specimens include stone, metal, wood and pottery materials from Central America and West Indies together with burial artifacts and skeletal materials furnishing rich data for the study of the physical and cultural anthropology of the American Indians. The publications of the museum are valuable, as can be judged from the few titles given below : Pre-historic objects from a shell heap at Erin Bay, Trinidad; Monolithic Axes and their distribution in Ancient America; Turquois mosaic arts in Ancient Mexico; Beads and beadworks of the American Indians; The Wood-carver's Art in Ancient Mexico; The Goldsmith's Art in Ancient Mexico; Cuba before Columbus; Jade in British Columbia and Alaska; The Antiquities of Manabi, Ecuador. Situated in the heart of the city of New York, the Museum of the American Indian, by virtue of its excellent arrangements and scientific classification, affords the best facility for the study of the aboriginal culture of North America; some of the terracotta heads and facial representations appeared to me strongly reminiscent of the Buddhistic sculptures of Indonesia.

The American Museum of Natural History, incorporated in 1869, has come to be one of the most important and progressive institutions of the New World. Its learned President, Henry F. Osborn, is renowned in the domain of pre-historic studies. It was due to Prof. Osborn's suggestions that Mr. Roy Chapman Andrews led the now famous expeditions into the desert wastes of Siberia and also that Dr. H. De Terra could come to explore the sub-Himalayan regions and North Burma in search of the fossil man, under the auspices of the Yale University. This line of Asiatic exploration and research will, let us hope, lead to some epoch-making discoveries. With its rare collection of Siberian and Chinese material, as well as those from the North

and South American Indians, *Mexican textiles, Mayan sculptures and ethnological materials* from the Pacific Inlands, this museum *serves as the most* important centre of study of the evolution of Man and of the various races. Its principal of endowment (1930) amounted to 15,064,159 dollars with an annual operating income of 1,647,857. In 1932, its African wing was opened with 1,000,000 and the south Oceanic wing with 1,500,000 and the Th. Roosevelt Memorial (1933-34) addition was erected with 3,500,000 dollars. What a valuable work is being done by the Museum would be clear to anyone from the following list of its publications : The Extinct Rhinoceroses, facial painting of the Indians of Northern British Columbia; The decorative art and sociology of the Amur tribes; The Eskimo of Siberia; Craneology of the North Pacific Coast, etc., amongst the museum Memoirs. It published also volumes of Anthropological papers from renowed scholars : Technique of some South American feather work; Mythology of the Black foot Indians ; Pre-historic bronze in South America ; Peruvian textiles ; The Sun-dance of the Crow Indans; Kinship in the Philippines; The history of Philippine civilization as reflected in religous nomenclature; Racial types in the Philippine Islands; The Aztec Ruins; Time Relations of prehistoric pottery types in Southern Arizona; Peoples of Asiatic Russia; Anthropometry and Blood types in Fiji and the Solomon Islands; The physical characteristics of the Ontong Javanese. Such subjects apart, the Museum applies itself to the study of astronomy, mineralogy, geology, paleontology, comparative and human anatomy, etc., together with provision for class room work (begun in 1880) in natural science, geography and history, for high school and college teachers.

The Metropolitan Museum of Art is another equally grand institution with rare collections and educational facilities not only for the teachers and students of public schools but also for practical workers in the field of design and decorative art. The museum arranges radio-talks, concerts, study hours and even lectures for the deaf. It has a library of over 70,000 volumes and its Oriental Collections embrace China, Japan, Korea, India, Persia and Asia Minor, as I have already discussed in my *Art and Archæology Abroad* (pp. 86-93). Incorporated in 1870, the Museum constructed its original building costing $1,519,090, with additions of a million dollar in 1900, and another million between 1914-1925, reaching the formidable total of $7,577,327 in buildings and equipments. Its budget for 1930 was as follows : From the City of New York $501,495; from memberships $143,770; from endowment $89,956; from admission fees $15,000; from sale of publications $54,592 : in all $804,818.

Miscellaneous Collections

Heaps of American Indian materials are found in the various museums, small and big, stretching from Arizona to Mexico. The Heard Museum, Phœnix, Arizona, shows pre-historic objects from mounds and cliff dwellings, ancient and modern pottery from Central America, Mexico and South America. The Arizona State Museum, with an operating income of $5,435 from the University, has pre-historic remains from Toltec and Aztec Mexico.

California is proud of several important collections; the Museum of Anthropology of the University of California was established in 1901 with a special emphasis on Western America, Peru, Egypt and on ancient Mediterranean Civilization. There are also exhibits from Oceania, Australia, the Philippines and other parts of Asia. The Los Angeles Museum of History, Science and Art was established in 1910 and shows varied ethnological material, excellently exhibited, from India, Central Asia, the East Indies, Australia, Melanesia, Polynesia, Africa and the two Americas. Its operating income in 1930 amounted to nearly 600,000 dollars. So the South West Museum shows the principal of endowment in 1930 as $607,351. Its special field is archeology, ethnology and history of the South Western States.

The Museum of the University of Colorado has ethnological material on American, Indian, Chinese, Japanese and Philippine peoples. Its operating income from the University is 8,600 dollars. Similar materials are found in the Colorado Museum of Natural History with an endowment of over $200,000. New Mexico, really an integral part of old Mexico, has many important collections on pre-Columbian antiquities : The Aztec Ruins National Monument Museum established in 1916 and the Museum started in 1928 by the University of New Mexico. But the biggest research centre is the Laboratory of Anthropology started in 1927. John D. Rockefeller, Jr., donated over $300,000, and the Rockefeller Foundation authorised grants totalling sixty thousand dollars for six years for graduate instructions in anthropological field method. Fifteen selected students are granted annually *all expense scholarships* and they work in co-operation with the University of New Mexico and the Government Bureau of Indian Affairs. The School of American Research is developing field museums at the sites of excavations in co-operation with the local authorities.

From the modern collections of Arizona and New Mexico to the extensive archæological remains of Mexico, Guatemala and other zones of Central America, we find a natural connection and extension. The oldest traces, so

far found, of human culture, are supposed to be in New Mexico and Minnesota. Some ditch-diggers discovered the skeleton of a young girl who is supposed to have lived some 20,000 years ago. Is she an ancestress of the American Indian, whether he is Navajo or Peruvian ? When Prof. Albert E. Jenks of the University of Minnesota finished his examination of the skeleton of the young girl, he declared her as belonging to the Mongoloid family. Hrdlicka and other anthropologists, establishing the Asiatic origin of the earliest races of America, have, however, expressed doubt about the antiquity of this so-called " Paleolithic Girl " and the so-called Pleistocene finds at Folsom, New Mexico, where excellent arrow-heads were discovered buried in the bones of extinct bisons which perished some 15,000 years ago.

The gaps between this dim pre-historic past and the historic civilizations of the Mayas and the Incas have not yet been filled. But there is no doubt to-day that the Peublo and the Navajo Indians are connected culturally with the Mexicans and Peruvians. The Maya civilization was highly developed before the birth of Christ. The first recorded Maya date, as ascertained from the deciphering of the Maya hieroglyphs, goes to the third century B.C. While astronomers helped in determining the Maya calendrical cycles (the Mayans were intelligent enough to invent the zero *independently*), their results were happily corroborated by the researches of a meteorologist Dr. A. Z. Douglass : " He discovered that the firs and pines of New Mexico and Arizona record droughts and rains with minute accuracy in the size and quality of their annual rings." Thus he managed to bridge gaps in chronology back to 700 A.D. The intensive study of the pottery and ceramic designs also helped to cover the five centuries of culture from 700 to 1200 A.D. Thanks to the progressive policy of the Government of Mexico, Alfanso Caso, the Mexican Archæologist, excavated the great tombs in Monte Alban. He was fortunate in discovering rich ornaments for nose, lips and ear, jade, alabaster and polished crystals, human bones with hieroglyphs, gold filigree, handful of pearls and one as big as a pigeon's egg and sacred paintings " more precious than rubies." These are the first archæological offerings of the sacred city of Monte Alban in the Mexican State of Oaxaca. Equally amazing discoveries come to the credit of Earl Morris who excavated the Temple of the Warriors in Chichen Itza. Amidst extraordinary diversity of styles and patterns, the Central American archæological finds nevertheless show a genetic relation with those of South America. Mummies have been found in New Mexico and elaborately wrapped mummies are also found in the museum at Lima showing how the two peoples were connected. Vera Cruz,

Guatemala and Honduras are also gradually yielding their treasures as described by Gann, Joyce and other archæologists. Their researches are slowly unfolding the history of America's " Valley of Kings." The work was started nearly a century ago by the American diplomat-explorer, John L. Stephens who re-discovered some 44 ruined cities and published his report in 1841. Catherwood, the English artist who accompanied Stephens, made excellent drawings of several important ruins, and the English explorer Alfred P. Maudslay was the first to apply scientific methods to the study of the ruins. But nothing was done to prevent the disintegration of the remains until 1925, when the Mexican Government organised its department of monuments. The Mexican Bureau of pre-Hispanic Monuments is headed by Señor Marquina who fortunately discovered in 1936 El Castillo, the most impressive of all pyramid-temples at Chichen Itza, which like many other ancient temples, " embraced within itself an older temple that has been completely concealed for centuries." A study of the outer structure of the temple demonstrates its calendrical significations, the Maya Toltec cycle consisting of 52 years of 365 days each. Superb examples of Mayan pottery have been found by the archæologists of the Carnegie Institution, Washington. A splendid mural painting of Mayan village-life at the sea shore was recently discovered at the temple of warriors, Chichen Itza.

Thus the materials for the study of pre-Columbian art and culture, in North, Central and South America, are increasing so enormously that several volumes would be necessary to give a fairly adequate survey. Some of the leading American Museums and Universities and Research Institutions like the Universities of Harvard, Yale, and California, the Field Museum of Chicago, Peabody Museum of American Archæology and Ethnology, Archæological Institute of America, Bureau of Ethnology, Washington, American Anthropological Association, American Antiquarian Society, the Carnegie Institution, the Smithsonian Institution and the United States National Museum, Washington, amongst others, are making notable contributions. But one has got to establish correspondence also directly with the museums of Central and South America which publish most of their reports and monographs in Spanish and Portuguese. In many cases these pre-Columbian relics are reminiscent of Chinese culture, and possibly, on closer analysis, other elements of oriental culture may gradually be discovered. The history of human civilization in America cannot, therefore, be written without reference to some of the races of Asia, especially of the Mongoloid family, who are now known definitely to have negotiated with the New World through the land-bridge of the North Pacific. The Harvard Yen-ching Foundation may

gradually turn its resources to this fascinating line of investigation. So the racial and cultural cross-currents of the Middle and the South Pacific are being studied by the Bishop Museum of Honolulu, closely co-operating with the Yale University. Asia and America thus stand to-day on the threshold of new historical revelations, independent in cultural evolution, yet inter-related and inter-dependent in the field of cultural origins. The vast expanse of the Pacific seems appropriately to embrace thus the Old and the New World.

NOTE :—That Columbus of Genoa was not the first to discover America was stated in many publications. Three of the American States : Wisconsin, Minnesota and Dacota have ordered that in their school manuals it should be definitely written that America was discovered 500 years before Columbus by the Scandinavian navigator Lief Ericsson of the 9th century. Recently two Canadian scholars have given the credit of this discovery to a Buddhist priest called Hui Sien who, according to Mr. John Murray Gibbon, crossed the Pacific in a junk "Tia Shan" and reached Vancouver about 499. Prof. Gibbon of Canada quotes a geographer of the time of George III who studied the problem of Chinese contribution to the trans-Pacific voyage. Mr. Tom MacInnes, another Canadian writer on Oriental Affairs, has also alluded to Prof. Gibbon's hypothesis, according to which the Chinese Buddhist priest passed the winter in the Isle of Nootka, Vancouver, where he left three monks to propagate Buddhism. No other trace of Chinese Buddhism has been found there except the Chinese coins of the Tsi dynasty discovered in that quarter, in 1876. Remains of Buddhist temples were reported (*Vide* '*Maha Bodhi* Journal, Vol. X, No. 2, June, 1901) to have been discovered also in Mexico, in the State of Sonora on the Pacific Coast and near the town of Ures in the same State, with a statue of Buddha and with Chinese Buddhist inscriptions. A substantial and interesting inventory of such theories and opinions has been recorded by Mr. Chaman Lal in his recent book *Hindu America*, published by New Book Co., Bombay.

CHAPTER II

CULTURAL MIGRATIONS IN OCEANIA

CULTURE is the historical bye-product as well as a very essential characteristic of Man. But the history of Man is explored and interpreted with varying degrees of success in the various continents. Through sustained and systematic research, Man in Europe is better known to-day than Man in Asia, yet, strangely enough, Asia is admitted by a majority of Anthropologists to be the " cradle of the human race." From Asia, by a process of spontaneous or compulsory diffusion, the human species reached the other continents. The Heidelberg and Piltdown Men reached western Europe at the Quaternary Period of the Geologists. No definite remains of Tertiary Man have yet been found. If with the progress of research such remains of Man's handiwork are discovered, those will be attributed to our " elder brother " of the Palæolithic group. For the present we are obliged to confine our attention mostly to our own race of Man, the proto-Neolithic *Homo Sapiens* whose creative activities form the bulk of the culture-history of the upper Palæolithic period. No trace of Palæolithic Man has so far been discovered in the New World and consequently we may assume that the North and the South America have been peopled exclusively by the Eurasiatic race of *Homo Sapiens*. Migration of culture from Asia to America in the pre-historic days has been admitted by many scholars. With regard to the continent of Africa, the problem of early Man and his culture is very obscure. But the recent discovery of the Rhodesian Man already proves the existence of " an archaic form," as says Prof. Seligman, " which persisted until a few thousand years ago." The Black Race may in course of time be proved to have reached Africa from his original cradle in Malaysia or to have migrated from Africa *via* Madagascar, the Andaman and the Nicobar Islands to the Malayan world.

This momentous drama of the migration of the earliest races of the world was staged on the vast expanse of water extending from the Indian Ocean to the Pacific. Very appropriately, therefore, this area has been characterised by the author of *Man—Past and Present* (Cambridge, 1920), Mr. A. H. Keane, as the *Indo-Pacific* Domain. British scholars generally call it Australasia, while the Continental scholars name it Oceania, which we prefer to adopt. India played a very important rôle in this drama of ethnic and cultural diffusion, and yet Indian scholars have not been sufficiently alive

so far to the importance of this line of research. We hope that our brief survey of the important centres of Oceania would lead to the widening of our historical perspective.

We may open our survey with the Dark Races, who offer at present the darkest problems of anthropology. Prof. Seligman (*Races of Africa*, London, 1930), an authority on the subject, characterises them as the Negro race about whose cradle land we cannot be sure. We can only divide them into a dark wooly-haired tall type and a short pygmy type (Negrillos-Negritos) who are physically and mentally "infantilistic." Moreover, they are divided geographically also into (*a*) African and (*b*) Oceanic or Melanesian. In this connection we may quote with profit the observation of Keane : "The cradle of the human family lay most probably in Malaysia (Java Man). From this central area of dispersion the first migratory movements ranged North to Asia, West to Africa and East and South over the whole of the Oceanic world by land connections which have since been greatly reduced by subsidence." The black descendants of the Java Man may be admitted to have spread over Papuasia and Australia, where they persist in their primitive form, and they also penetrated to Micronesia and even *Polynesia*, although here the Blacks were mostly absorbed by the later Caucasian intruders from Asia. The medium-sized or tall type is found in Papuasia, while the dwarfish Negro type is found in the Andamans and in Melanesia. One branch of this race, the Australian, is isolated and threatened with extinction. According to Seligman, "the Australian Race includes the Australians and the Pre-Dravidian tribes of Southern India and Ceylon (Vedda), the Sakai of the Malay Peninsula and probably the Toala of the Celebes." The Jungle tribes of Southern India like Kurumba, Irula, etc., and the almost extinct Veddas of Ceylon are short dolichocephalic races often with prominent brow ridges and noses generally platyrrhine. From the curly hair of the South Indian tribes like Kadir and Panian, Seligman admits the possibility of Negrito influence, and Dr. B. S. Guha has definitely identified a few Negrito types in Inda.

Next to the discovery of the Java Man in Malaysia comes the sensational discovery of the Peking Man in the very heart of the Mongolian world. According to Keane the original Indo-Malayans, in course of their dispersions during the early Pleistocene age, passed through Malay Peninsula, Indo-China, and India to the Himalayan regions and Tibet whence they may have entered the Mongolian world, where the original type came to be modified into the Mongoloid family. Professor Arthur Keith and a few other authorities on Fossil Man have already tried to connect the Java Man

with the Peking Man and the Mongoloid race is now admitted to be the link between the Old World and the New.

Thus the true aboriginal element was represented by a widely spread " Southern Race " extending from Africa to Australia whose primitive culture was totally submerged or has been gradually disappearing. On this Pre-Malay ethnic substratum was super-imposed later cultures of a composite type called Malayan, Caucasian, Indonesian, Polynesian and so forth.

The Malays are a mixed race divided into two groups—(*a*) Oceanic and (*b*) Continental. The historical Malays whose language came to be the *lingua franca* of the Archipelago had their original home in the Menangkabau district of Sumatra and the " Continental " Malays are worthily represented by the highly gifted Khmer races of Indo-China, suggesting the well-nigh proved intrusion of the Mongoloid races into the domains of the Pre-Malayan Blacks and as a result of the intermingling there emerged the present Malay stock which was further enriched by the fair Indonesians. This mixed stock of " Oceanic or Insular " Malays, according to Keane, is met among the Dayaks of Borneo, the Tagalogs of the Philippines, the Minahassas of Celebes and the aboriginal races of Formosa reaching the very heart of the North Pacific. The Mongoloid Malays differed so much from the primitive Caucasian elements there that the latter were named by Logan as Indonesians. These include now all the natives of Caucasian type throughout Oceania. But they belong, according to Keane, to the earlier migrants, the Pre-Aryan Caucasian (Hamitic Iberian) races. They are tall, handsome with Indo-European features, who displaced the Black aborigines or Papuasians. As these Indonesians moved eastwards to their present home in the Pacific, specially in Polynesia from Hawaii to New Zealand, their place was taken by the Mongoloid races, who inter-married with the aborigines, producing the present Malay stock.

The Pre-Aryan western Caucasians were followed by the Aryan hordes and the two streams met and commingled in the North Pacific, specially in Micronesia now under Japanese Mandate. Here we find two intrusions—(a) one from the north, that of the Megalith builders who passed *via* Japan to Micronesia where they joined hands with the (*b*) Southern branch " who ranged from Indo-China to Malaysia and thence to Polynesia." This hypothesis of Keane would explain the prevalence of the *Marais* and other monolithic structures scattered in the whole Pacific as far as the Easter Island and culminating, in the works of Ponape (East Carolinas), with the Cyclopean walls. No less astonishing is the fact that the Nukuor Islanders (Central Carolinas) still speak the pure but archaic form of the Maori language of

New Zealand which is linguistically and culturally connected with the Hawaiian in the North Pacific. Cultural exchange between Indo-China and the Philippines is admitted now on the evidence of pre-historic finds, and Dr. Beyer, one of the leadng authorities on pre-historic remains of the Philippines, is of the opinion that some of the Maori stone implements were derived directly from the Filipino arche-types.

Lastly, some outstanding cultural relics and institutions of Hawaii are traced back to the Kwang-tung province and to Indo-China by Dr. E. C. Handy, the renowned ethnographist of the Bishop Museum, Honolulu. Thus we are fairly sure to-day, in spite of occasional gaps and obscurities, that there were distinct Caucasian migrations from the Indo-Malayan zone, through Indo-China and Micronesia, to the very heart of the Pacific where we find striking types and survivals amongst the Polynesian races. The history of race movements in Oceania could now be traced in broad outlines through five important geographical zones, as given below, based on the classification of Mr. Keane :

I. Malaysia : Madagascar, the Andamans, the Nicobar Islands, Malay Peninsula, Sumatra, Java, Borneo, Celebes, Moluccas, Sulu, the Philippines and Formosa.

II. Micronesia : Pelew (Palan), Ladrones (Marianne), Caroline, Marshall, Gilbert, Phœnix group, etc. (under Japanese Mandate).

III. Melanesia : (*a*) Papuasia or New Guinea, Louisiade, etc. (*b*) Bismarck Archipelago, Solomon, Fiji, New Hebrides, New Caledonia, Loyalty Islands, etc.

IV. Australia and Tasmania.

V. Polynesia : New Zealand, Tonga, Mangaia, Rarotonga (Cook group), Austral (Tubnai), Society Islands (Tahiti), Tuamotu, Marquesas, Samoa, Hawaii, and Easter Island, the last about 2,000 miles from South America.

Thus Oceania is "the great insular world which comprises nearly the whole of the Indian and the Pacific Ocean."

Man in Australia

The biggest island in the world as it is, Australia remained like America completely outside our geographical knowledge till its rediscovery by modern European explorers. The appearance of man in Australia and several problems connected therewith are still enveloped in mystery. A group of scholars believed in the nineteenth century, as some of them believe even to-day, that human species there could be traced back to the remote early

Stone ages. This school of thought was represented by Dr. Herbert Basedow, author of *The Australian Aboriginal* (Adelaide, 1929). He was the state-geologist, the chief medical officer and Protector of Aborigines for the Commonwealth Government in the Northern Territory. Over and above his rich personal experience in Australia, he had, to his credit, intensive researches in the anatomical school of the University of Breslau under the late Prof. Hermann Klaatsch. Dr. Basedow also examined thoroughly the Australian skulls and skeletons in the Hunterian Museum of the Royal College of Surgeons and in the anthropological galleries of the British Museum and other European collections. He admits that most of the evidences have been irretrievably lost, yet much might be "expected from any of the contiguous continents or islands in this region, upon which occur Tertiary or later sedimentary formations. The discovery of the oldest fossil man, the Pithecanthropus Erectus, in Java, was by no means accidental." After an excursion to Java he admitted that his knowledge of Melanesian ethnography helped him "to explain the existence of several cults in the northern districts of Australia which border on the Indian Ocean." He reiterates the theory that once a chain of lands linked together Australia, India and South Africa, "the continental masses which in passed eras supplied this link, zoologists have christened *Lemuria* while geologists refer to the lost land as *Gondwana;* it is somewhere within the area once occupied by this submerged continent.....that we must look for the cradle of the species Homo." This line of anthropological relationship connects the Australian and the Proto-Australian with the Veddas of Ceylon and the pre-Dravidians of India explaining therein at the same time the Negroid elements. He sees in the Australian Aboriginal "another palæontological overlap, a living fossil man." He refers to a few survivals of fossil man in the Pleistocene gravels of the Tennant's Creek district, also in South-Eastern Queensland (Talgai skull discovered in 1884). The new school of anthropologists, however, appears to be more sceptical and some definitely deny the possibility of identifying the remains of fossil man and his handiworks. Some even consider that, as in New Zealand so in Australia, racial migrations may have taken place in late historical periods. The theories of Basedow have recently been challenged by Keith Word, Campbell, Hale and Tindale in their report submitted before the XVI International Geological Congress, Washington, 1933; and by Mr. D. A. Casey in the Third Congress of Prehistorians of the Far East, Singapore, 1938.

But even if we are unable so far to solve the chronological problems, there is no difference of opinion with regard to the unique value of the

Australian field for the students of anthropology and sociology : their nature worship, fire ceremonies and legends, the worship of ancestors, of the sun, moon and the mythical serpent, sex worship and phallic cult, initiation, totemism and totemic diet restrictions, etc., have been exhaustively treated by Dr. Basedow and other scholars. In their religious consciousness we find the Evil Spirit as well as the concept of a Supreme Being existing side by side. There were attempts to communicate with superhuman beings, mimicry of animal sounds, song-dialogues, group dances and singing with music-sticks, bamboo-trumpets and skin-drums. Thus on the psychic plane they were fairly advanced although their technical skill was rather poor : stone spear-heads of great variety have been found in North Kimberleys (West Australia) and the aborigines were familiar with both the flaking and chipping processes. Pulverizing ochre for painting was quite common, testifying to the development of a distinct school of aboriginal art. A series of rock carvings has been discovered along the coast of New South Wales, Queensland and West Australia. Veritable primitive art galleries have been found in the Flinders Ranges (South Australia). There we find human foot-prints, tracks of the wallaby, the kangaroo and the turkey, and Mr. Basedow observes : " These primitive carvings or petroglyphs of the Northern Flinders Ranges have more than a passing resemblance to the ancient *graffiti* of Egypt." From the animal designs he concludes that the great lake system of the Australian interior, now a huge desert as in Asia, once attracted many animals now extinct.

In New South Wales and Queensland the tribes developed the interesting cult of carving trees and we find thereon intricate patterns, geometrical designs, animal or human forms. Along the north-west coast of Australia where baobab trees flourish, the tribes carve various designs on the bark and I found many such bark-pictorial documents carefully preserved in the museums of Adelaide, Melbourne and Sydney. Under the overhanging rock-shelters have been found many remarkable drawings, chiefly of animals, in charcoal, kaolin and ochre. Against the black wall we find designs in white, yellow and red pigments. In the cave drawings on the Humbert River (Northern Territory) we find a series of grotesque dancing figures in pipe-clay, which material together with ochres was obtained by inter-tribal barter system. Near the Pigeon Hole on the Victoria River (Northern Territory) was discovered admirable charcoal drawings of hopping kangaroos and other animals. The primitive artist manufactured his brush by chewing green shoots of cane. In the body decorations also the different tribes show a remarkable diversity of talent. Generally speaking. these aboriginal

pictures are flat and without perspective. But more gifted artists sometimes draw " a real scene from life combining subject with action while environment or surroundings rarely if ever receive attention." Occasionally we notice the combination of two or more figures, human beings appearing sometimes in full, sometimes in half profile. The animal drawings are wonderfully accurate. Effigies of the demi-god often suggest that the earliest tribal ancestors were believed to be animal first and human afterwards.

The most intriguing thing is that among the sacred tribal drawings there has been found a human figure fully nine feet in length, reminding some scholars of a crude Buddha type. One cannot be sure, however, as to what kind of external or exotic influences operated on this apparently isolated group of aborigines in Australia. We quote below a significant passage from Basedow's *The Australian Aboriginal* (pages 343-44) :

" During an expedition in the northern Kimberleys of Western Australia, it was my good fortune to re-discover several drawings of this type in practically the same locality as that recorded by Sir George Grey, near Glenelg River. One figure was perfect, others were partly obliterated or incomplete. The best design was in a cave near the top of a prominent bluff the local Worora people call Berrial; it was drawn in ochre upon a steep face of rock immediately under an overhanging ledge of quartzite. The figure was unquestionably that of a human being, although it measured fully nine feet in length. It lay fully extended, upon its left side, with its arms placed straight against its sides. It reminded one forcibly of a Buddha in a Ceylonese temple. What made the figure seem un-Australian was that it was clothed in a long, striped garment, resembling a priestly gown, from which only the head, hands, and feet are excluded. A loosely fitting belt is also shown. As seems common to all these drawings, the facial features are only indicated by the eyes and nose, the mouth being omitted. Another characteristic, which is shared by all other drawings, is that the head is surrounded by a number of peculiar, concentric bands, through which, and from which, many lines radiate, giving the structure the effect of a halo surrounding the head of a saint."

Mr. C. P. Mountford, while not agreeing with Mr. Basedow with regard to the high antiquity of the materials described above, has nevertheless given a qualified support to Mr. Basedow's theories (Mountford : *Aboriginal Rock-carvings in South Australia* : Australian Association for the Advancement of Science Proc., Vol. XIX, 1928; *A Survey of the Petroglyphs of South Australia,* 1935). While collecting materials for his study of the petroglyphs, Mountford came to know that some native legends recorded

from the Northern Flinders and Lake Eyre refer to mythical monsters called Kaddy Makara and he concluded that owing to the high standard of workmanship in the reproduction of crocodile, we must admit that rock-engraving has been carried out from times long previous to that period until the recent breaking up of the tribal groups.

Mountford has tried also to explain the meanings of the more symbolic designs like concentric circles, barred circle, straight line markings, fernleaf motif, U within U, and the sun or wheel. He concludes by saying that many of the designs " are similar to drawings made by pre-historic man on the cave-walls of Europe, in the Canyons of the Colorado and in such widely separated places as the Sahara Desert and Tasmania." Mr. Mountford joined the party of the Anthropological Expedition to the Warburton Range (West Australia) organised by the University of Adelaide and the South Australian Museum, which has a splendid collection of ethnological and artistic materials (Norman B. Tindale, *Oceania*, Vols. 6-7, 1936).

Australian Aboriginal Art : A Select Inventory

The immovable rock carvings and rock paintings apart, there are valuable collections of movable art objects in several museums of Australia and abroad. Thanks to Mr. Frederick D. McCarthy of the Department of Anthropology of the Australian Museum, Sydney,* we have now an excellent handbook, *Australian Aboriginal Decorative Art*, published in 1938 and also a valuable paper on " A comparison of the prehistory of Australia with that of Indo-China, the Malay Peninsula and Archipelago." (Congress of Prehistorians, Singapore, 1938).

Mr. McCarthy has classified the materials under the following heads :—

I. Eastern Australia : shields, boomerangs, spear-throwers, clubs, carved trees. II. North-eastern Queensland : swords, shields, cross-boomerangs and paddles with incised and painted designs. III. Central Australia and East Kimberleys : weapons and utensils, *tjurunga* (sacred symbols), ceremonial regalia, ground drawings. IV. Arnhem Land and Adjacent Islands : (North Australia) twined baskets, bark baskets, bark drawings, grave posts, weapons, chanting tubes (didjeridu). V. Western

* The Australian Museum in Sydney is the oldest institution of its kind in Australia. It has valuable collection of zoological and ethnological specimens and a library containing 28,948 volumes (1937). The expenditure during the year 1937 was £18,214 and it counts on a statutory endowment of £800 per year.

Australia : Baobab nuts, pearl-shell phallocrypts and concentric geometrical figures.

The decorative patterns and designs on these objects, when thoroughly analysed and studied on a comparative basis, will form a substantial contribution to our knowledge of aboriginal art. As early as 1894 Dr. A. C. Haddon published *The Decorative Art of British New Guinea.* Recently, Raymond Firth has published an extremely interesting volume on *Art and Life in New Guinea* (1936) which should be read along with the exhaustive survey of *Melanesian Design* (1933) in two richly illustrated volumes by Gladys Reichard. The Geological Survey of New South Wales publishes from time to time special memoirs in its ethnological series. So the periodical *Art in Australia* publishes important articles, among which should be noted " Application of Aboriginal Designs " (1930) by Margaret Preston and " Inspiration and Designs in Aboriginal Art " in 1935 by Ursula McConnel. But to understand the mind of the aboriginal artist and his social *milieu,* one must constantly refer to the notes and monographs published in the valuable journal *Oceania,* edited by Prof. A. P. Elkin of the University of Sydney.

Privileged to examine his collections and to meet some of his colleagues and pupils, I may say that the new group of Australian scholars are inspired by a sincere desire to study sympathetically the cultural documents of the unfortunate aborigines fast dying out.

Prof. Elkin very rightly emphasises the human values in Australian primitive art, as we see from his *Foreword* to Mr. McCarthy's book. For nearly a century the public have been taking interest in the aboriginal cave paintings and rock carvings which belonged to the life of totemism and religion. But the decorations on the mundane objects also belonged, according to Prof. Elkin, to the sacred world of mythology : " These artistic designs, being links with the creative past, are traditional in character and comparatively unchanging in form. The tribal or regional distribution of designs is based on the mythologies and rituals of the tribes concerned. Just as the efficacy of a ritual depends on an exact re-enactment of the traditional form and the chanting of the old songs, even though the meaning of many of the words may be no longer understood, so, too, the efficacy of the patterns on decorated objects depends on the careful reproduction of the motifs, if not of the exact patterns, and a knowledge of the traditional song connected with them."

After years of intensive study of Australian social organisation, economics and totemism, Prof. Elkin observes : " We can distinguish but

cannot separate the economic, religious and aesthetic aspects of primitive man's life, indeed, we may add his social life; for in some cases the purpose of the manufacture of some beautiful article is the fulfilment of a social duty."

Mr. McCarthy in his excellent monograph reflects a very sane view with regard to aboriginal art : "Each body of primitive art, then, has to be examined in detail in its own cultural setting before comparisons may be made that will offer any valid constructive evidence concerning origins or relationships, and before the question of independent origin or diffusion may be settled."

He draws our attention to the fact that the handiwork of primitive man and primitive art motives have given a fresh stimulus to our modern decorative art, specially of Germany and America. So the International Art Exhibition of Paris (1937) invited specimens of Australian aboriginal art and many of the native designs came to be utilised by commercial artists. Books on African Negro sculpture already point towards a new field of artistic study. Decorative artists will find rich materials in the two splendid volumes recently published : *Melanesian Design* by Gladys Reichard (New York, 1933) and *Art and Life in New Guinea*, by Raymond Firth (New York, 1936). Some of the Australian designs compare favourably with those of the Papuans, Melanesians and Polynesians. Artistic traditions, no doubt, develop and mature in settled communities but it is no less true that art may also flourish among nomadic tribes like the Australian aborigines, the Bushmen in Africa and the Magdalenian artists of the European Stone age.

We quote below a few salient observations of Mr. McCarthy :

"The most distinctive feature of the geometrical art of Australia is the regional occurrence of concentric figures, either formed on a single continuous line, or consisting of separate figures increasing in size from the centre outwards, combined with flutings in various patterns.

"The concentric diamond and circle elements are the most widely distributed motifs, and would appear to be the oldest. To my knowledge no meaning for the concentric diamond has been recorded, although it was probably connected with totemic and spiritual ancestors or culture heroes, and varied in the different localities in which it occurs. Its origin is obscure inasmuch as it appears also in the decorative art of New Guinea, Melanesia, and Polynesia, and in fact, throughout the world. While recognizing the probability of an historical relationship between its occurrence in Australia and New Guinea, it is interesting to consider the possibility of its having been derived in Australia from the grain of timber which it strongly suggests. All the Australian weapons are cut with grain, and, on curved trees, shields, and clubs in the Australian Museum collection, the lines of the graining have actually been used to form this pattern. Further, the repetition of the lines of the grain produces the other associated elements, such as the chevron and knee-shaped flutings.

"The origin of the concentric circle in Australia is not definitely known. The occurrence of intermediate concentric figures such as ovals, which link the angular diamonds

and the circles, suggests the possibility of local development; but as the concentric circle is common in Papuan and Sepik River art, an historical relationship is more probable between its Australian and New Guinea occurrences. The employment of snakes and snake-like figures in art designs throughout Australia is perhaps due to the universal distribution of the rainbow serpent belief. Whether the zigzag of Western Australia is a stylized example of it is not certain.

"Both naturalistic and geometric forms of art occur in rock carvings and paintings, on weapons and sacred objects, and as personal adornment on the bodies of performers in ceremonies. In some instances extreme stylization of naturalistic motifs has resulted in almost geometrical figures, perhaps as a result of the desire to conceal the ritual significance of the design from the uninitiated. One cannot say, however, that the geometric art as a whole evolved from the naturalistic; the predominant geometric elements cannot be explained in this way."

Museums of Victoria

Next to Sydney, the capital of New South Wales, we find in the beautiful city of Melbourne, the metropolis of the state of Victoria, some remarkable collections treasured in its museums, libraries and art galleries. As early as 1853, the public library of Victoria was founded and the Natural History Museum, also founded at the same period, was located in the grounds of the University of Melbourne. An Art Museum was opened in 1861 to which was added a Picture Gallery in 1864 and a Technological Museum in 1869. The public library is housed in a magnificent building opened in 1913 and is specially well represented in the sections devoted to Art, Music, Australiana, Shakespeariana and History. The Technological Museum exhibits, in the Queen's Hall and the adjoining gallery, Australian and exotic timbers, food products, ores and minerals, metallurgical models and products, agricultural tools, etc.

The Art Gallery is divided into different sections devoted to numismatics, portraits, manuscripts and documents of historical interest. The works of Australian painters are housed in the McArthur Gallery while the Rotunda exhibits the works of European masters valued over £1,74,000. The Print Gallery contains over 5,000 drawings and prints and is one of the finest in the Southern Hemisphere. The Verdon Gallery contains ceramics, glassware, silver, antique furniture, specimens of Egyptian, Greek, Roman, Mediaeval, Renaissance as well as Modern art-objects. There are also Chinese, Persian and a few Indian works of art. Regular classes in painting and drawing are held in the Art Museum with students not under the age of fifteen. The full course extends over five years with day classes and night classes. There are several prizes and a travelling scholarship of £225 per annum tenable for two years and offered to the best students selected by open competition. Since 1904 over £400,000 have been spent out of the

Felton Bequest in acquiring works of art for the National Gallery. The Geological and Zoological collections are also valuable and over 12,000 specimens of Australian fossils make the palæontological collection the finest in Oceania. To the students of Anthropology, the most remarkable collection is that presented to the Museum by Sir Walter Baldwin Spencer, famous for his monumental studies on the Arunta and other tribes. His natural history and ethnological collections are displayed in the spacious Spencer Hall, containing over 8,500 specimens illustrating the aboriginal culture : stone implements, fire-making tools, canoes, bark drawings, petroglyphs, ornaments, clothing, baskets, nets, wooden vessels, burial and ceremonial objects; life-size models of the natives are used to depict totemic ceremonies and camp scenes. This kind of representation is also found in the Children's Room, which contains various types of human families and copies of the African Bushman drawings. No less remarkable is the Maori collection in the New Zealand Room, showing rare green stone and wooden implement. textiles and wood carvings. Materials from the South Sea Islands are specially valuable because those were collected " before native cultures were contaminated by European influence." There is a huge head-hunting canoe from the Solomon Islands and a big ethnological collection from New Guinea now under Australian mandate.

Western, Eastern and Southern Australia

The value of the Spencer collection of Melbourne could be appreciated when we read what a famous Australian architect observed : " I made numberless drawings from the native implements in the Melbourne Museum which houses the priceless Spencer collection." Mr. Benson earned fame by decorating the Winthrop Hall of the University of Western Australia. While visiting Fremantle and Perth on our way to the British Commonwealth Relations Conference at Sydney, we visited that Hall which best represents the style of Western Australian renaissance. Here, for the first time, the designs of the aboriginal artists and craftsmen were utilized for modern architectural decoration. There is a small Australian aboriginal collection in the local museum. Perth is proud of the first *free* University of Australia, a unique experiment; it was organised, thanks to the princely bequest of Sir Winthrop Hacket amounting to £425,000. Founded in 1911-12, the free University of Western Australia began in 1927 to draw the Government grant of £29,000.

Turning from the West to East Australia, we visited the University of Queensland while passing through the beautiful city of Brisbane. Found-

ed in 1910, the University has shown a remarkable growth in course of the last few years and though there is no regular department of Anthropology, I had the privilege of receiving much useful information, thanks to the kind courtesy of the Registrar and of Prof. Dr. H. C. Richards, who is a recognized authority on the geology of Australia, specially on the problems of the Great Barrier Reef. (Vide *Memoirs of the Queensland Museum* and *Journal* and *Proceedings* of the Royal Society of New South Wales, Vol. 81).

The anthropological collection of the Museum of Brisbane is quite interesting. The aboriginal tribes of North Queensland and of the Arnhem Land in the extreme north offer problems of capital importance. (Vide *North Queensland Ethnography Bulletins*).

These problems have been studied along with other problems of Man in Australia by the expert group of scholars attached to the South Australian Museum and to the University of Adelaide. Coming in personal touch with these scholars and specially with Mr. Norman B. Tindale, I could examine with great profit the splendid collection of the Museum of Adelaide. As early as 1844, Mr. W. A. Cawthrone published, from Adelaide, South Australia, his *Rough Notes on the Manners and Customs of the Natives*. In 1855-56 was founded the South Australian Institute with a museum and a public library. The ground-floor of the museum is devoted to the exhibits of Natural History : mammals, fishes, reptiles with the skeletal restoration of the great Diprotodon now extinct.

The upper floors, called the Stirling Gallery of Australian Ethnology, are devoted to the various native tribes and their handiwork grouped in separate cases. There is a special collection of the Pacific Island Ethnology. Thanks to the enthusiasm of the museum authorities for aboriginal art, Mr. C. P. Mountford, Mr. Herbert M. Hale and Mr. Norman B. Tindale are collaborating to preserve in a systematic way the valuable designs and other art objects of the vanishing race. Recently, Mr. Tindale made a significant attempt to establish the relationship of the extinct Kangaroo Island culture with the cultures of Australia, Tasmania and Malaya (*Records of the South Australian Museum*, Vol. 6, No. 1, 1937).

India and Australia

While Mr. Tindale was trying to link South Australian culture with the culture of far-off Malaya, two American scholars, W. W. Howells and W. L. Warner of the Peabody Museum of American Archæology and Ethnology, Harvard University, were publishing in 1937 the results of their anthropometric examination of some of the Australian races (Vide

Anthropometry of the Natives of Arnhem Land and the Australian Race Problem).

They discarded the theories of the Australoid affinities of the Moi of Indo-China and of the Ainu of Japan. After a thorough and scientific analysis of the data so far as available, they came to the conclusion that the primitive Australians were most probably connected with the aborigines of South India, specially with the Veddas of Ceylon. The first home of the Australians was some part of Southern Asia, whence the type reached Australia and Tasmania (probably *via* Malaya) from Timor or New Guinea. The famous Talgai skull discovered in Queensland as well as the Cohuna skull seems to attest to the persistence and antiquity of the Australian type. There was probably a long lapse of time between the coming into the Pacific of these stone age Australoids and that of the Negritos who reached New Guinea but not Australia just as they spread over South Indian forests without reaching Ceylon. Mr. E. A. Hooton, in his *Up from the Ape*, suggests that the Dravidians " arose from an Australoid strain compounded with a white strain, probably of the far-flung Mediterranean type, and not the Aryans of Proto-historic times." The Australoid Veddas also have been modified by some other strain, possibly the same white stock present in the Dravidians. The Australian came to be extinct in almost every realm but his own, because of his low potential for survival. Only in the marginal locations—the Bismarck Archipelago, Northern New Britain, New Caledonia and Tasmania—have the Australoids survived intermixing with the Negroids who followed the Negritos.

Thus according to the latest scientific investigators, the Australoid types originated most probably in India and spread into the Pacific as the representatives of the early type of *Homo Sapiens* in some remote period of Asiatic history.

In conclusion, therefore, we may urge that the fascinating study of Human Relations should be developed by the leading universities and learned societies of India. In that study we may, at the beginning, be baffled by the bewildering variety of problms of pre-historic antiquities and archæology, of anthropology and philology. But if we persist in seeking light from the history of Man in our neighbouring countries, we may hope some day to reconstruct the ruined fabrics of human civilization. Sometimes the most primitive may appear to be the most significant in explaining the history of cultural migrations, as we realise while following the trends of research in Oceania or Australasia.

CHAPTER III

MAORI LAND AND CULTURE

NEW ZEALAND, the home of the Polynesian Maoris, is generally considered to be a recent addition to our geographical knowledge. Tasman rediscovered it in 1642 and Captain Cook placed New Zealand on the map in 1769. But it was not settled by the Europeans until 1839 and that is how we found recently arrangement for the celebration of its first Centenary, on which I felicitate my friends of New Zealand, who were so kind to me during my visit just after the Sydney Conference (1938).

Thanks to the recent progress in the science of Anthropology, we are now pretty sure that the Maori people discovered the islands long before Tasman. When Captain Cook arrived, there were about 100,000 Maoris, out of whom 30,000 in the South Island dwindled to 3,000 only according to recent statistics. The Maori population reached its lowest ebb, 39,854 in 1896 and the extinction of the race was predicted. But suddenly the Maoris showed signs of revival; their number increased to a little over 82,000 although 50 per cent. is reported to be half-caste. The Maoris slowly regained self-confidence and self-respect under the effective guidance of their noble leaders like Sir Maui Pomara, a Minister of the Crown, Sir James Carroll, once Prime Minister of the Dominion, Sir Apirana Ngata, M.P., poet, scholar and statesman, and Dr. Peter H. Buck, anthropologist and Director of the Bishop Museum, Honolulu.

Dr. Buck, whose Maori name is Te Rangi Hiroa, has given the most authoritative account of the migration of the Polynesians right up to New Zealand (Vide *Ancient Hawaiian Civilization*, pp. 19-30). He showed how the Polynesians, an offshoot of the Caucasian race, worked eastwards from the south of the Himalayas and reached the islands of the Malaya Archipelago, known collectively as Indonesia. There they came in contact with the Mongoloid ancestors of the Malayas, intermixed with them, developed the knowledge of ocean-craft and, provided with a single outrigger canoe, became famous as a sea-faring people. About the beginning of the Christian era they entered into the heart of the Pacific Ocean, according to the researches of Abraham Fornander of Hawaii and Percy Smith of New Zealand. Two routes were open to them : The Northern or Micronesian route extended from the Philippines through Micronesia to Hawaii in the North Pacific (*circa* 450 A.D.); the Southern or Melanesian route extended from

Indonesia, along the north coast of New Guinea to Fiji and thence to the Polynesian group of islands like Samoa and Tonga and Tahiti, where they probably found earlier settlers called Manahune with Melanesian characteristics. Seligman also is of the opinion that some of the islands that are now Polynesian were inhabited by the primitive *black* population and therefore we find today much variability among the different groups of Oceania : " In the East the skin is light, the hair wavy or straight; in the West there is a considerable number of dark-skinned people with almost frizzly hair."

About 950 A.D., according to the Maori genealogies, the audacious Polynesian pioneer Kupe sailed from the Tahiti zone and discovered *Aotearoa* or " the Land of the High Mists " now known as *New Zealand.* From the 11th to the 14th century we find Maori traditions recounting the stories of long voyages from Central Polynesia in organised expeditions under their chiefs or *Arii* accompanied by " learned priests as navigators." These chieftains and priests or medicine-men are called *arikis* and *tohungas.* Between the years 1150 and 1350 many voyaging canoes came to New Zealand from *Hawaiki* and return voyages were also made. About 1150 the celebrated Maori ancestor Toi sailed down to the " Land of the High Mists " in search of his grandson Whatonga who had been blown out to sea and who was rediscovered. 1350 is usually regarded as the date when immigration ceased and the Maori island was cut off from the " sacred tide to *Hawaiki.*" About a century after, but before the discovery of America by Columbus, sweet potato (the original home of which is Central or South America) was brought into Polynesia and therefore Prof. Dixon of Harvard supported the theory that some Polynesians whom we already find in their farthest eastern colony, the Easter Island, may have discovered South America and returned with the sweet potato. It is indeed a glorious achievement and the Maoris perpetuated, in narrative speech and song, the memory of their crossing and recrossing of the Great Ocean of Kiwa or the Pacific. This great achievement was due to their canoe and therefore canoe is the auspicious symbol as well as the common welcome to the various Maori tribes visiting one another while they sing :

Toia mai, te wake !	Draw hither, the canoe !
Kumea mai, te wake !	Haul hither, the canoe !
Ki te urunga, te wake !	To its pillow, the canoe !
Ki te moenga, te wake !	To its bed, the canoe
Ki te takotoranga i takoto ai te wake.	To its bed, the canoe : shall rest the canoe.
Haere mai, haere mai.	Welcome, twice welcome !

Dr. Herbert E. Gregory, formerly, the Director of the Bishop Museum, Honolulu, also furnished us with important details regarding Polynesian migrations. Long before European navigators had ventured far from land, the Polynesians were sailing back and forth among the dots of land in the Pacific making voyages thousands of miles in length. The Polynesian outposts in the Carolines and at the Easter Island are nearly 9,000 miles apart and 3,800 miles of water lie between Hawaii and New Zealand. Four early trips were made from Hawaii to Tahiti, 2,400 miles apart. Uenga, a twelfth century sea-rover, sailed from Samoa to Tongareva, thence to Tubuai and through the Tuamutus to Tahiti, covering about 4,000 miles mostly against the trade-winds. Tukuiho, sailing from Rapa, discovered Rapa-nui or Easter Island after a voyage of 2,500 miles with no intervening places of stopping. Karika, a Samoan Chief, discovered and colonised Rarotonga (*vide* E. Best, *Journal of the Polynesian Society*, Vol. 36, 1928), and the thirteen voyages of Tangiia cover a distance of more than 18,000 miles. These apparently unbelievable records have been accepted as true by a group of experts who devoted their lives to the elucidation of the Polynesian problems. Led by Percy Smith and Col. Gudgeon, Edward Tregear and Elsdon Best laid the foundation of the Polynesian Society in 1892. In a famous work, *Hawaiki*, Percy Smith tried to show that the Polynesians reached Fiji, Tonga and Samoa by 5th Century A.D. He traced the ancestors of the Polynesians from India by way of Java, Celebes, New Guinea, etc., into Polynesia proper, east of the Fiji group. In his paper "The Geographical Knowledge of the Polynesians," Percy Smith observes : "We are too apt to forget that in former times they had a class of canoe, *Pahi*, capable of containing a large number of people and abundant provisions . . . . It was in canoes such as these that the Maoris made the long voyage from the Pacific Islands to New Zealand . . . . The Maori traditions make special mention of these double canoes (*Vide* E. Best, *Journal of the Polynesian Society*, Vol. 32, 1924) and further state that one, the Arawa, had three masts." Strengthening this thesis of Percy Smith his loyal collaborator Elsdon Best wrote a valuable paper on "Polynesian Voyagers" (*Dominion Museum Monograph*, No. 5, Wellington, 1923). He characterises the Polynesians as "probably the most fearless neolithic navigators (*vide* E. Best, "The Neolithic Maori," *Journal of Science and Technology*, Wellington, 1923) the world has seen." He refers also to the Maori tradition saying that their ancestors, in times long passed away, migrated from a hot country named Irihia (Cf. *Vrihia*, an ancient name of India) and crossed the Ocean in an easterly direction." In another paper "The Origin of the Maori" (*Journal*

of the Polynesian Society, Vol. 32, 1924), Elsdon Best gives a most interesting inventory of the various theories connecting the Polynesians and the Maoris with India. J. R. Logan, the renowned ethnologist, opined that " the Polynesians are a branch of the ancient Gangetic race of India." Two other valuable papers on this subject were published in the *Journal of the Polynesian Society*, on " Asiatic Gods in the Pacific " by E. Tregear and on " Asiatic and Polynesian Points of Contact " by Percy Smith. Elsdon Best studied the Maori lore for over half a century and his papers and publications ranged over 40 years from 1890 to 1931 when he died, as I gathered from his friend and colleague Mr. Johannes C. Andersen, another authority on Maori music, myths and legends.

The mind of the Maori, quite apart from his material culture, is also a problem to many anthropologists. He is reputed to carry almost down to the 19th century some sort of neolithic culture but he demonstrated a mind nurtured in poetry and mysticism. Discussing the spiritual concepts of the Maori, Elsdon Best (Vide *Dominion Museum Monograph*, No. 6, 1923) made the following significant observations :—

" The superior gods of the Maori are personified forms of natural phenomena; his mythology and religion teem with such personifications and with mythopoetic allegories; no people known to us have excelled the Polynesians in evolving such quaint concepts. Observe the charming myth of Tane and the Dawn Maid; the story of the Mist Maid and Uenuku (the Rainbow); the concepts of the Wind Children, the Cloud Children, and the Children of Light. Peruse the myth of the grey old Earth Mother calling to her stricken offspring to return to her and find rest : she who refused to remember their rebellion in the days when the world was young; she said, ' I brought them forth to the World of Light, in death shall they find rest with me. Though they have erred and rebelled against me, yet are they still my children. Mine be the care of the dead.' And the Maori will tell you that this saying of the primal Mother was the first evidence of the mother's love that outlives all races and all creeds, as exemplified in a terse aphorism of yore : *He aroha whaereere, he potiki piripoho* (A mother's love a breast-clinging child)."

Discussing the legends of " Maui—A Demi God " of Polynesia, Dr. W. D. Westervelt of Honolulu observed that " several hints of Hindu connection are found in the Maui legends." The New Zealanders claim Maui as an ancestor of their most ancient tribes and sometimes class him among the most ancient of their gods, calling him " creator of land," " creator of man," " the solar fire." In his foreword to Dr. Westervelt's

volume, Percy Smith very significantly refers to Maui's successful efforts to lengthen the day-light and observes : " It may be suggested that if the Polynesians are, as some of us suppose, Proto-Aryans who, in very ancient times, led the advance guard of the Aryan migration from—let us say, with Oppert—the shores of the Baltic, to south-eastern Asia; then the legends of Maui's deeds in lengthening the days would, in a measure, be accounted for." (*Cf.* Tilak, *The Arctic Home in the Vedas*).

The Maori showed a remarkable genius for personification and thus very appropriately his mind is characterised as " mythopoetic." Maori chants and other varieties of oral literature are remarkable and no less remarkable are his contributions in the domain of arts and crafts.

Maori Arts and Crafts

As early as 1898, Elsdon Best communicated his " Notes on the Clothing of the Ancient Maori " to the *Transactions of the New Zealand Institute* (Vol. 31). Thirty years after he quoted some Maori traditions with regard to the training of the young man in arts and crafts (*Dominion Museum, Bulletin*, No. 13, 1929) which we quote below :—

" Now when the lad was fairly grown, then the task of teaching him the use of weapons and tools commenced . . . . Then the lad was taught the construction of houses, huts, cooking sheds, store-houses . . . . Also was he taught the use of tools in agriculture . . . the art of dressing timber with stone adzes. The use of stone chisels and drill was also taught, also the arts of wood carving and of painting designs " (E. Best, *Journal of the Polynesian Society*, September, 1928). The handiworks of this highly gifted race were unfortunately scattered in different parts of the world and only recently careful inventories are being made, thanks to the earnest researches of the members of the Polynesian Society, Wellington, and of the Bishop Museum, Honolulu. We draw the attention of the public in this connection to the richly illustrated catalogue of " The Oldman Collection of Maori Artifacts " (*Memoirs of the Polynesian Society*, Vol. 14, 1938).

Some important facts relating to the arts and crafts of New Zealand as compared with those of Polynesia and Micronesia are given by Mr. Ralph Linton of the Field Museum of Chicago (Vide *Ethnology of Polynesia and Micronesia*, Chicago, 1926). He points out that there were two distinct types of Maori art in New Zealand. The natives of the South Island used simple angular designs in their carvings. All the Maoris employed angular designs on their baskets, textiles and feather robes. " The natives of the North Island employed only curvilinear designs in their carving and paint-

ing. The most important single element was the spiral, but highly conventionalised human figures, faces and animal forms were much used in carving. Many of the scroll designs painted on rafters were said to be derived from plant forms but were so highly conventionalised as to be unrecognisable."

Like other Polynesians the Maoris made some use of human figures carved in the round which were set up in sacred places as representations of gods or ancestors. But most of the Maori figure carvings were in high relief on slabs. A small grotesque human figure called *heitiki*, carved from jade or whale bone, was the most favourite Maori ornament worn around the neck on a cord. Their finest ornaments and implements were made from nephrite, a variety of jade of rich green colour and, according to Linton, the desire for this special material was one of the main motives in the migration to New Zealand from Central Polynesia where the Maori jade objects were taken by the first native explorers.

While the ordinary dwellings of the Maori were small and crudely built, the Maori Council houses were the most beautiful structures in the Pacific. Linton describes in detail a structure that was acquired by the Field Museum of Chicago with a ridge pole hewn from a single log, 60 ft. long and weighing over a ton and a half : " The posts, panels, projecting end of the ridge-pole and the front of the house were carved with highly conventionalised human figures representing ancestors or mythological beings. After carving they were coloured red with a mixture of ochre and oil. The rafters and underside of the ridge pole were painted with scroll designs in red, black and white. The reed-panels of the walls were worked into designs. The finished house was the pride of the village and so potent were the spells recited at its erection that even if the village was taken by an enemy, its Council house would be allowed to stand unplundered until it fell to pieces."

Just a century ago the fight between the Maoris and the British was terminated by the Treaty of Waitingi (1840) and a body of scientists and social workers organised the New Zealand Institute. It published in 1868, the first volume of its *Transactions and Proceedings*. Devoted mainly to Natural History, the *Transactions* publish, now and then, articles on Maori culture like Maori origins, food products, marriage customs, games and amusements, forest lore, etc.

In 1892 was founded the Polynesian Society with the Queen Liluokolani of Hawaii as one of the patrons. Naturally the members of the Society tried to supply the proper perspective of Maori culture by bringing in the larger problems of Polynesia and of the vast Pacific Basin Culture. Elsdon Best, for example, wrote an article in the first number of the *Journal* (15th

April, 1892), on the *Races of the Philippines*, and another writer tried to equate the culture of the Maoris and that of the Incas of Peru. So E. Tregear described the stone images (3 ft. to 35 ft. high) of the Easter Island which was discovered in 1722 and where, one supposed, a peculiar script was evolved which could be connected with the pre-historic scripts of India and of western Asia.

With Tregear appeared, as joint-founders of the Society, Elsdon Best (whose writings we have quoted before) and S. Percy Smith; and they often went beyond New Zealand to seek the clues to Polynesian origins, *e.g.*, equating the *Uru* of the Maoris with Ur of Chaldea. Percy Smith's paper on " The Aryan Predecessors of the Maoris " (1919) still deserves careful perusal. The Polynesian Society was soon strengthened by another remarkable scholar, Mr. Johannes C. Andersen, who is poet, musician and anthropologist all in one. He was joint-editor of the *Journal*, with Elsdon Best, and for years Librarian of the Turnbull Library, Wellington. He published his *Maori Life in Aotea* (1907), the *Myths and Legends of the Polynesians* and the richly documented *Maori Music*, the last published amongst the *Memoirs of the Polynesian Society*, in which series we also find " The Maori " and " Tuhoe " by E. Best and the " Evolution of Maori Clothing," a masterly monograph contributed by Dr. Peter H. Buck, the renowned Maori anthropologist, now the Director of the Bishop Museum, Honolulu. I gathered from Dr. Buck that valuable relics of Maori art and culture are scattered amongst the various missionary collections of France and Italy, of Germany and England. The museums of Vienna and Cambridge, the British Museum and the Royal College of Surgeons, London, have got to be ransacked by a student of Maori lore and he must not forget that there are private collections also like those of Von Hügel, Oldman and Giglioli.

The new generation of Maori scholars like Ngata, Pomare and Buck were inspired by the work of the White anthropologists and started researches and publications of their own. As a result of this happy collaboration was established the Board of Maori Ethnological Research, with special funds to foster original investigation and to provide for printing and publications of their own. It is due to the activities of this generation of noble workers that we see today a veritable revival of Maori spirit and culture in every sphere of life.

Another important institution is the Alexander Turnbull Library of Wellington, which offers, the greatest facilities to the public for the study of Polynesian problems and original records of New Zealand history.

The capital city of Wellington is naturally proud of its Dominion Museum with its remarkable collection of Maori arts and crafts, which were kindly shown to me by Mr. W. J. Phillipps. He contributed a valuable paper on " Maori Carving " (*Art in New Zealand*, June, 1938) in which he explains the fundamental elements in Maori designs and refers to the late Mr. Harold Hamilton, the Director of Maori Arts and Crafts, Rotorua, as an authority on the subject. The Dominion Museum also publishes a valuable series of *Monographs, e.g.*, Polynesian Voyages, the Maori School of Learning, Maori Myth and Religion. Among the *Bulletins* of the Museum we find, among others, the following studies of Elsdon Best : The Stone Implements of the Maori; The Maori Canoe; Maori Agriculture; Maori Religion and Mythology. Dr. Peter Buck's valuable researches are being published, far away from New Zealand, by the Bernice P. Bishop Museum of Honolulu, famous throughout the world for its patronage of Pacific research, through which some day, we hope, Polynesia and India would be brought closer to one another.

The Maori arts and crafts of the South Island are to be found in the Museum of Christchurch and more fully in the Otago Museum of Dunedin. The culture of the Maoris of the South Island has been specially studied by Mr. H. D. Skinner of Dunedin University, which is the only University in New Zealand to provide for systematic lectures on anthropology. Mr. Skinner has a rare collection of Maori artifacts and he contributed many valuable papers to the *Journal of the Polynesian Society* (1921, pp. 71-78; 1924, pp. 229-43). As early as 1923, he published his study on *The Morioris of Chatham Islands* in the Bishop Museum Memoirs, Vol. 9. In Dunedin, there is a large collection of Maori tools, ornaments, canoes and wood-carvings in the Otago Museum under the expert care of Prof. Skinner.

Coming from Dunedin in the extreme south to Auckland in the extreme north, every visitor to New Zealand will be impressed by the rich and scientifically classified collection of the Auckland War Memorial Museum with Gilbert Archey as Director. Thanks to the kind introduction of my esteemed friend Mr. J. C. Andersen, I was warmly received by Mr. Archey, who devoted a considerable part of his valuable time to explaining to me the various exhibits and their historical and artistic significance. New Zealand should be proud of such an imposing edifice, one of the best museum buildings that I saw on the Pacific Basin. Mr. Archey recently prepared a valuable paper for the Auckland Meeting of the Australian and New Zealand Association for the Advancement of Science (January, 1937). I found his observations so interesting that I conclude this section on " Maori Art and Culture " by

drawing largely from his valuable notes as well as from his excellent handbook of *Maori and Oceanic Ethnology*. Mr. Archey refers to the widely prevailing theory that the art of the South Island, more *rectilinear* and simpler, was closely connected with the art of Eastern Polynesia. The art of the North Island, on the contrary, is predominantly *curvilinear* with double spirals and " bird-headed men," akin to the spirals and bird designs of Solomon Island, New Guinea, and Borneo where the Negroid race and Melanesian culture predominated. Skinner, however, pointed out that several complications would arise out of the above theory. He considered it unlikely, although not quite impossible, that the conquering Polynesians would take the art of the Melanesian people whom they subdued in the North Island. Moreover, *curvilinear* patterns are not exclusive to New Zealand, for they are found in the Marquesas and also in the Easter Island where we find a " non-patternised art of naturalistic human figures and animals." Skinner, therefore, opined that a *curvilinear* art derived from New Guinea and the neighbouring islands was basic in Eastern Polynesia and that some *rectilinear* fashion had transmuted it in the Tahiti-Rarotonga-Austral region. But recent researches have, according to Mr. Archey, simplified the problems by proving that the ancient culture of New Zealand was distinctly Eastern Polynesian and that, inasmuch as there is a certain Negroid element in the Polynesian race, one need not postulate a separate Melanesian migration to explain the Negroid strain in the Maori. Arts that appear to be superficially similar may have developed quite independently and we need not strain after relating such widely separated decorative arts. Among the basic elements of Maori carving we find a human figure with the face in profile, the " bird-headed man " or *manaia*, and out of the interlocking mouths of these, there developed the double-spiral. This succession of human figures with alternate full face and profile is paralleled in Rarotonga. So the early Maori neck pendants are decorated with a succession of angularly stylized human limbs foreshadowing the conventionalization of the human figure in the *rectilinear* art of Eastern Polynesia.

Thus *human* figures, as against *geometrical* patterns, played an important rôle in Maori art and their large houses contain wall-posts carved with representations of some ancestors or hero-gods with whom they were connected by their " geneological symbolism." They excelled also in their stone-tool industry, thanks to their many-toned jade found in the west coast of the South Island. With their high-class tools and excellent timber, the Maoris naturally evolved a rich tradition of wood-carving. So in their weapons, utensils and ornaments in wood or stone, bone or shell, we always

notice, as Mr. Archey observes, " A touch of decoration, so appropriately applied as to lead one to expect rather than to be surprised at the high standard attained in formal decorative art."

Among the animal motifs we find grotesque figures—half-man, half-animal—and various types of lizards in Maori carving (*Vide* Elsdon Best, *Journal of Science and Technology*, Wellington, 1923). But however grotesque those may appear, the human figures were representations of their ancestors, generally in wood, sometimes in crude stone, as in the island of Tahiti. Mr. Archey refers to the prevalence of human figures both in wood and stone in the Marquesas Islands. But it was in Easter Island that Polynesian sculptures attained their most majestic proportions. In that Island good timber was extremely rare while there was an abundance of soft stone, which was freely used and, by the spirit of competition amongst sculptors and chiefs, the Polynesians of the Easter Island created larger and still larger statues ranging from 3 ft. to 35 ft. To reach that far-off Island was indeed an achievement in the history of primitive navigation. It was possible only through centuries of negotiation with the Ocean by the heroic Polynesians, who made a veritable cult of the Ocean and of the canoe-dance. They sang in the past, as they sang to me, when the hospitable Maori families of Rotorua received me, with due ceremony, in the home of Mr. H. Tai Mitchell, a leader of the Arawa tribes :—

Behold my paddle !
It is laid by the canoe's side,
* * * *
See ! I raise on high
The handle of my paddle,
The Roku-o-whiti.
I raise it—how it flies and flashes !
Ha ! The outward lift and the dashing,
The quick thrust in and the backward sweep !
The swishing, the swirling eddies,
The boiling white wake,
And the spray that flies from my paddle !

Piri papa te hoe
Awhi papa te hoe !
* * * *
Hapai ake au
I te kekan o taku hoe
I te Roku-o-whiti
Whiti potato, rere potato
Mama potato
Te riakanga, te hapainga
Te komotanga, te kumenga,
Te Riponga, te awenga,
A te puehutanga
O te wai o taku hoe nei !

APPENDIX A.

From Johannes Andersen, M.B.E., F.R.S.N.Z.,
Howard Road, Lowry Bay,
Wellington.
12th February, 1938.

Dear Dr. Kalidas Nag,

It is long since your letter of 1st August arrived, and I have often thought of what I could tell you of the work here in the field of anthropology and archæology. After seeing the scope of your book, kindly sent on to me by the University of Calcutta, I am better able to see what I can tell you. Here, in this land, archæology is a very different thing from archæology in other lands such as those with which you deal. Beyond a few ornaments in stone and bone, and many weapons and implements in those materials, all the Maori artifacts were in wood, extremely perishable when compared with metal or earthenware. The Maori, in common with other Polynesians, was a man of the stone age, and knew neither pottery nor metals. Further, New Zealand has been such a happy hunting-ground for collectors, who admired the exquisite and very varied and artistic work of which he was capable, even in such intractable material as our New Zealand greenstone (nephrite), that the best of his work has been lost to New Zealand, and now rests in museums and private collections scattered over the world; and in order properly to study our Maori artifacts we must visit the museums, particularly of Europe, and private collections such as those of Mr. W. O. Oldman, of London, and Mr. Harry Beasley, of Kent, England. I think that these two men alone possess as characteristic collections of New Zealand artifacts as we do in New Zealand !

In order that we might know what Maori material was available for examination outside New Zealand, Te Rangi Hiroa (Dr. P. H. Buck, now Director of the Bernice Pauahi Bishop Museum of Honolulu) visited many European museums and made lists and took photographs of all artifacts he could learn of : this is yet to be completed and published. Then our Journal of the Polynesian Society, of which I am Editor, has in several recent numbers published lists and illustrations of the Maori (New Zealand) artifacts in the collection of Mr. Oldman above referred to. This series is just finished, and will shortly be issued as a Memoir of the Society : I have a spare pull of the illustrations and list, the 93 plates including many hundreds of artifacts, many of extreme beauty, and I send this on to you as an indication of what the journal is doing in the recording of known archæological specimens of this kind. In the coming number (March) of the Journal we shall start a series of the Cook Islands artifacts in Mr. Oldman's collection, following it with the Tahiti section until we have illustrations and descriptions of all the material in his possession, each series being subsequently published as memoir, which will be available, at a small cost, to students who may be engaged on anthropological or archæological work in the Pacific. We have also published from time to time illustrations of old artifacts in the collection of Mr. Beasley above referred to, and we make it a practice of publish-

ing, whenever possible, illustrations of new artifacts unearthed from swamp, or midden, or burial-cave, in New Zealand itself, so that students may at least see what artifacts are known and where they are to be seen.

Then there are Museum collections and private collections located in New Zealand. First the very extensive collection of tools ornaments, and like small artifacts in the Otago Museum, Dunedin, in charge of Mr. H. D. Skinner, lecturer on anthropology in the Dunedin University, and the only University lecturer on that subject in the Dominion, though we are hoping for more liberal treatment in the future. Not only has he an excellent collection, beautifully arranged, acquired by find, purchase, exchange and donation, but he has one or more students almost constantly, engaged in excavations of old *Kainga* (village) sites or ancient middens, the excavations being methodically performed and full record kept of the stratification of the material, drawings, photographs, and other detail, making the collections of material found as scientifically valuable as possible. In the Polynesian Journal was recently completed a long paper by Mr. Skinner on the subject of Maori amulets, based largely on material in his collection in the Otago Museum. That museum also has good examples of Maori carving of larger objects, such as canoes and canoe-parts, houses with their wall-slabs (poupou), barge-boards (maihi), doorways (pare) and so on, but in this kind of work the Auckland Museum under Mr. Gilbert Archey is particularly strong and the material, requiring room for its proper display, is housed in the new and very roomy memorial museum. Mr. Archey issues a Museum bulletin in which latest finds are recorded, illustrated with good photographs. Mr. Archey has recently published some very good papers on Maori carving and its Pacific relationships, also an analysis of the underlying motifs : this subject is still in progress. The new Dominion Museum, Wellington, of whose committee of management I am a member, has a fair general collection lately set out to much better advantage than heretofore. Their collection of greenstone *tikis* (neck pendants) is particularly fine. The Christchurch museum is comparatively poor in Maori artifacts; the Alexander Museum, Wanganui, is richer, but lacks a man to set them out to best advantage. There are several private collections, and illustrations of artifacts from these appear in the Journal from time to time, a long series of scrapers of various kinds being due to be illustrated in the March or June number.

Until Mr. Skinner was appointed Lecturer on Anthropology in the Dunedin University, a few years ago, the study was altogether in private hands, in spite of which much excellent work resulted, and this appears in the published books of men like S. Percy Smith, Elsdon Best, Richard Taylor, E. Shortland, T. W. Gudgeon, John White, and others : and of men with Maori blood in their veins, Te Rangi Hiroa has taken a very high place indeed.

Sir Apirana T. Ngata, a Maori graduating at Canterbury College, Christchurch and taking his LLB., has for very many years taken an active interest in the welfare of his people, teaching them how to live so as to resist the blight of civilization to which so many native races succumb; so that now the Maori is beginning to take his own place, and a quite distinctive place, in the evolution of this country, studying his own past, and developing by keeping what is best of his own culture and adopting what is most suitable for him from the new civilization in the midst of which he

suddenly found himself, bewildered and unprepared. He is now proving that there is no need for him to degenerate or to retrogress. Furthermore, whereas his numbers for many years dwindled, and his speedy extinction or at least absorption was freely prophesied, statistics now show that whilst numerically he is far fewer than the *Pakeha* (European) element, say 63,000 as against 1½ million, he is now increasing in numbers at a faster rate than the *Pakeha* among whom he is living; so that even allowing for the greater increase in number of the *Pakeha* from year to year, a time will come, if present condition continue, when the proportion of Maori compared with *Pakeha* will gradually rise. What then will the Maori influence be ? It would be curious to consider the problem : I should not fear its answer. The Maori is billingual, preserving his own tongue while also mastering the tongue of the *Pakeha*.

Sir Apirana Ngata has also been responsible for what is now known as the Maori Purposes Board, a Board consisting of Maoris and *Pakehas*, and of which I am a member, which controls the expenditure of a considerable sum of money in assisting the Maori race in matters of health, education, and social matters generally. Through this Board, too, many of Elsdon Best's fine monographs on various Maori subjects were published. Sir Apirana Ngata has also collected and analyzed a great many Maori songs, which in their poetry combine history and mythology, and of these 200 have already been printed, with their history, name of composer, tribe of origin and liberal annotations explaining all obscure details in the text; of many of them the tunes have been recorded on discs. These 200 songs have been printed only in Maori; his object is to get the literature on record first; translation can follow latter.

Now, my dear Kalidas Nag, you will see that much of this little sketch of what we are doing here is outside the scope of your book, though not outside of the scope of your interest. My own interest in it all you will judge by my connection with the various bodies, and my intimacy with the men engaged in the work; also by the books published by me : Maori life in Aotea; Maori String figures; Maori Music; Myths and Legends of the Polynesians, the book you saw in Buenos Aires. You will, too, recollect something of our conversations while there. Then my lectures, to schools, teachers, education institutes, and to the public generally in person and over the air, deal with these subjects as well as English literature, books, and natural history of New Zealand, Poetry and the technique of verse.

One thing in your book struck me : the illustration of the head dress of the woman or Ur Fig. 2 it is. I have read what I could of the discoveries at Ur for the Maori has a word 'uru,' meaning west, and we think he came from the west, though we cannot certainly trace him west of the East Indies; we think the country he calls *Irihia* may be India, for it has a great river, and high mountains. But none of the descriptions found in Ur of the neighbouring peoples in the least tallies with the appearance of the Maori or of the Polynesian. The question is, whence did the Maori come ? The best tracing of his route that we have is that by S. Percy Smith in *Hawaiki*, and he brings him from North-west Asia; but all is hazy.

Among our alien archæological objects is one I may mention. It is a bell or rather part of a bell; the upper part; the lower flange and the tongue are missing. It is bronze, and has a Tamil inscription round the body of it which says " This is the

ship's bell of the Mohammed Buks." This bell was found under the roots of a centuries old tree when it blew over in the very early days of settlement. The Maoris found it and were using it as a cooking pot. A Hindoo who visited the Turnbull Library told me "Mohammed Buks" was a common ship-name among Arab traders along the coasts of India. Had an Arab ship come as far East and South as New Zealand ? and if so, purposely or storm blown ? and, if so, what happened to the ship ? Shall we ever know more about this ? An account of the finding of the bell with an illustration of it, and a copy of the Tamil inscription was published in the *Transaction of the New Zealand Insti ute*, the chief science publication in New Zealand, of which I was editor for nine years, but relinquished the editorship so as to be able to devote more time to the editing of the *Journal of the Polynesian Society.*

I congratulate you on your lecture engagements; it is good meeting other people with kindred aims and different points of view looking at the same truth from different aspects. I am glad you met Te Rangi Hiroa, of the Bishop Museum. I have very pleasant recollections of being with him in the field among our Maori people when he was studying the technique of plaiting in its many phases, clothing, netting baskets, and I was studying Maori string-figures and Maori music.

NOTE :—Some very important papers were read at and published by the Third Congress of Prehistorians of the Far East which was held (January, 1938) under the auspices of the Government of the Straits Settlements of the Raffles Museum, Singapore. The Report was published in 1940 reaching us in 1941 at Calcutta when the bulk of my book was already printed. So I can only refer to a few papers bearing on my subject : Dr. H. D. Skinner in his "Maori adzes, axes, chisels and gauges from the Muruhiku region, New Zealand," concludes that "some of the types are present in coastal South-east Asia or in the off-lying island groups" (Celebes, and the Philippines being the more likely regions for allied forms). Mr. F. D. McCarthy contributed an exhaustive paper on the "Comparison of the prehistory of Australia with that of Indo-China, the Malay Peninsula, and the Netherlands East Indies." In discussing megalithic influences in Australia, he observed that in Australia the ritual use of stones was a most important feature of the historical initiation and totemic rites and that "the use of small natural stones and boulders in fertility rites was widespread in New Guinea, Melanesia, Polynesia and New Zealand." He concluded that the art of Central Australia and north-west of that area, was derived from the Bronze Age culture of Indo-China (Hoabinhien) and its expansion into Malay Archepelago and New Guinea. The perforated discoid clubhead of New Guinea and the shell rings of New Guinea and Melanesia were found to be related to those of Burma, India, Malay Peninsula, Indo-China and the Philippine Islands.

Mr. D. A. Casey of the National Museum, Melbourne, in his paper, challenged the antiquity of man in Australia although he admitted that "in several places industries of Palæolithic type have been recognized which are certainly very old." (especially on the south-east coast of South Australia).

CHAPTER IV

THE POLYNESIAN WORLD

THE importance of Polynesian culture is due primarily to the radical revision in our geographical concepts hitherto dominated by the readings of Atlantic geographers. Starting, as they did, from Europe, they arbitrarily called Western Asia, the Near East and Eastern Asia, the Far East. They did not suspect that there may be very important projections of Far Eastern culture into the Further Eastern World of the Pacific Basin penetrated and colonised by the highly gifted race, the Indo-Polynesians. Of the Western nations the Spaniards were the first to discover the Hawaiian archipelago, one of the strongholds of Polynesian culture. But just as the pre-hispanic civilisation of America was, for years, neglected or rather treated in a desultory and isolated fashion, so the Polynesian culture also came to be studied mainly on the hypothesis of " splendid isolation." It is a happy coincidence, therefore, that the United States of America was called towards the end of the 19th century to occupy the centre of the Polynesian World and to develop gradually the Hawaiian archipelago, with its headquarters at Honolulu, into the first American research centre of the vast Pacific World. To the credit of the American scholars it must be said that they are trying their level best to reconstruct the history of the Polynesian race almost threatened with extinction. In 1778 when Captain Cook was going round Hawaii on his way to and from Australia, the Hawaiians numbered 250,000. There were only 22,636 pure Hawaiians according to the U. S. A. Census in 1930. According to the Board of Health estimate of 1936, we find 21,594 pure Hawaiians in a total population of 3.93,277. In this land of *taboo* the Hawaiians offered no taboo against somewhat indiscriminate race mixtures, giving rise to two new ethnic categories : (*a*) Caucasian-Hawaiian, 19,319 and (*b*) Asiatic-Hawaiian, 18,271 according to 1936 estimates (*Vide* Prof. A. W. Lind : Population Notes : *Social Progress in Hawaii*, May, 1937). The Hawaiians not only have no prejudice against Orientals, they show a marked preference for the Chinese, who number 27,495. The Japanese of course, dominate in number with 149,886; we find also 53,550 Filipino and 6,683 Koreans in the population of Hawaii, a veritable melting-pot of Eastern and Western races. Full advantage of this rare ethnological laboratory would be taken if and when the various Oriental Universities and learned societies collaborate with the University of

Hawaii and similar institutions in different parts of the Pacific Basin. This was the burden of my discourse " Above All Nations is Humanity," which I delivered as the Convocation Address at the invitation of the University of Hawaii which I was privileged to serve in 1937 as a Visiting Professor.

At the Indian Science Congress of 1928 holding its sessions at the University of Calcutta, I had the privilege of addressing the anthropological division on " Indian Culture in Indonesia," while, from the same platform, my esteemed friend Dr. E. C. Handy of the Bishop Museum lectured on " Polynesia." In a special reception which we accorded to Dr. Handy at our Greater India Society, he regretted then, about ten years ago, that so little of India was known in the American centres of anthropological research and he nobly offered to bring India closer to the scholars in the Polynesian field. That promise was promptly fulfilled when, through Dr. Handy, an invitation was accorded to our late lamented colleague Dr. Panchanan Mitra who collaborated with the ethnologists of the Bishop Museum before joining the Yale University which offered him a Fellowship. The Bishop Museum of Honolulu collaborates closely with the University of Hawaii and the Yale University, and the Museum has established cultural exchange with the University of Calcutta. The premature death of Dr. Mitra deprived us of the chance of a systematic study on " India and Polynesia." He contributed, however, two valuable papers to *Man in India* (July-December, 1931; January-March, 1932) on " Cultural Affinities between India and Polynesia," where, among other things he wrote : " In 1929, on the kind invitation of Director H. E. Gregory, I was travelling through Northern, Central and Southern Polynesia in search of Indian elements in Polynesian culture. Visiting the islands of Oahu, Kawaii, Hawaii, Samoa, Fiji, New Zealand, Rarotonga and Tahiti, studying the great ethnographic collections of the Bishop Museum and Auckland, Wellington, Christchurch and Dunedin collections and coming in personal contact with some hoary-headed Polynesian ethnologists, like Elsdon Best, who welcomed me as coming from the old homeland of the Maoris, and being mistaken as a Polynesian islander in several places, I understood how close the similarities are between places whose cultures and peoples are now the furthest apart possible." Dr. Mitra, in his articles, quotes approvingly the thesis of the great Maori scholar Te Rangi Hiroa, now well known as Dr. Peter Buck, Director of the Bishop Museum. In his paper " The Races of the Pacific " (Honolulu, 1927), Dr. Buck traced the successive migrations of Man from his South-Central Asiatic home eastwards : first the Tasmanians, then the Australians, then

the Negritos of the Andamans and of Indonesia, then the Negroids to New Guinea and the Black islands of Melanesia as far east as Fiji. But the Polynesian world was still thousands of miles away and it could only have been reached by a superior race with rare courage and initiative. This race has now been supposed to have risen out of the mixture of the Indonesian or Caucasic stock with some Mongoloid blood, now known as Indonesian or the Proto-Polynesians. These daring sea-farers started, with canoes scooped out with stone adzes, for the great Kiva, the Pacific Ocean of the Maori. Through Micronesia (now under Japanese Mandate) they reached the Samoan group of islands, colonising Fiji on the way after a fight with the Dark races. From Samoa, they reached the Society islands with Raiatea and Tahiti as the traditional distributing centres of Polynesian culture. By an Eastern wave they were pushed thence to the Marquesas and Austral groups as far as the Easter Island. Pushing towards the South-West the Polynesians are supposed to have discovered New Zealand in the 10th century and finally settled there in the 14th century. Another branch of the Polynesians sailed towards the North and colonised the Hawaii group of islands which they are supposed to have settled as early as 500 A.D.

That was also the epoch of the phenomenal expansion of Indian culture in the whole of Indonesia from Champa and Cambodge (Indo-China) to Java, Borneo and Celebes. Curiously enough the starting point of these west-to-east migrations from the Asiatic mainland is generally placed at the beginning of the Christian Era when, thanks to the *Periplus of the Erythrean Sea* and the *Geography* of *Ptolemy*, the earlier expansions of Indian pioneer navigators and colonists were matters of known history. Such synchronisms in the maritime expansion of the Indians and the Polynesians into the heart of the Pacific world may not be accidental. On the contrary, they may furnish us with valuable suggestions for future researches in the Indo-Polynesian domain of cultural geography and anthropology. Linguistically also Indonesia and Polynesia are linked by the family of languages called " Austric " which spreads from Northern and Central India through Burma, Indo-China, Malaya and the Indonesian islands to Micronesia and Melanesia and to far distant Polynesia with Hawaii in the north, New Zealand in the south and Rapa Nui or Easter Island to the extreme east. Indian philologists like my esteemed friends Dr. S. K. Chatterji and Dr. P. C. Bagchi are interested in the linguistics of the Austric family of languages including those of the Polynesian group.

Indian Cultural Influence in Oceania

Dr. Panchanan Mitra was the first Indian anthropologist to tackle the problem of Pacific cultural origins from the standpoint of Indian and Indonesian culture, as we have seen in his two valuable articles contributed to *Man in India*. It is a matter of sincere joy to us that Dr. E. S. Craighill Handy is making valuable contributions to this highly intricate and interesting problem. His first paper was submitted to the Anthropological Section of the All-India Science Congress (1928) and published under the title 'Indian Cultural Influence in Oceania' (*Man in India*, Vol. viii, No. 1). The story of Polynesian culture may appear to be "a mere appendix to Indian History," and it may prove to be a very valuable appendix; for, as says Dr. Handy, "in the isolated islands of the Polynesian fringe of Farther India, there may have survived, there may still survive, ancient Indian lore and customs that have become hopelessly obscured or lost in India proper and Colonial India." Moreover, the traits of Indian culture that have dominated Indonesia and travelled as far as Polynesia, have also contributed largely to the stock of culture of Micronesia and Melanesia which lie between Indonesia and Polynesia. This thesis has been brilliantly sustained by Dr. Handy in his two papers which, because of their outstanding importance, we shall summarize for the benefit of our Indian students who may not have access to them.

The pre-occupation of the early group of scholars in the Indonesian field with Buddhism naturally led them to suppose that Buddhism is the only religion of India which migrated and that the earlier Brahmanical religion and culture were non-migratory. Recent archaeological discoveries, however, have forced us to revise that opinion, and to admit not only the possibility but the certainty of earlier as well as simultaneous Brahmanical expansions and intrusions, as we shall show in our special sections on French Indo-China and Dutch East Indies. A good case can be made out, according to Dr. Handy, for the presence in Polynesia of distinctly Vedic elements; but the existence of such traits as distinct from the later Brahmanical tradition which was of course based upon Vedic teaching, is not easy to be proved. If, as comparative study proceeds, it becomes clear that Polynesia had preserved elements of pure Vedic culture, we shall have an unbroken series of accretions of Indian derivation, including Vedic, Brahmanic, and Buddhistic, not necessarily in chronological succession. Traits of the Brahmanical culture preceding the Buddhist expansion in Indonesia during the first centuries of the Christian era are spread throughout Polynesia, Indo-China and Insulindia;

the heart of this Brahmanical culture was the worship of Siva. In Polynesia the cult of the *lingam* was fundamental in the ancient worship. Its manifestation in symbol and philosophy paralleled their prototypes in Saivism. And associated with this cult in all phases of the native culture are innumerable traits of Indic derivation.

The most recent phase of the movement of Indian culture eastwards that concerns the student of Polynesian history is that which witnessed the development of Buddhism in Indo-China and Insulindia during and after the 7th Century A.D. In view of the fusion of Buddhism with Brahmanism in Farther India, it would be inevitable that Buddhistic traits that came to Polynesia from this region would have become obscured. An example of a trait that probably had Buddhistic derivation is the division, by the New Zealand Maori, of their sacred lore into what they called " the three baskets of knowledge " suggesting the Buddhist *Tri-pitaka.* But this historic Indian culture is now believed to have been superimposed on similar accretions of the pre-historic epochs. With the Indian elements there seems to have been amalgamated an earlier and more barbaric type of culture of the " skull venerating peoples of Indonesia and South-east Asia such as the Ifugao of the Philippines, the Shans of Burma and the Nagas of Assam." Dr. Handy then referred to the excavations, by Prof. H. Otley Bayer of the University of the Philippines, of a stratified site of pre-historic habitation, in which were unearthed implements and with them, pottery said to correspond in type to materials from India and Burma described by Foote. In Burma and Assam, the folk whose culture is of this type represent physically a mixture of Caucasoid (Aryan) with Mongoloid. In the Philippines, the Ifugao and the related tribes are distinctly Caucasoid, and in Polynesia it is in the island groups, where the traits of this barbaric culture were dominant, that the physical type characterised as Caucasoid is most pronounced. Finally, the islands in Polynesia, namely, the Marquesas and New Zealand which best preserve the traits of this culture, are geographically on the outer fringe of the region; while in Indonesia and South-east Asia, the corresponding cultures are now isolated in the uplands.

The Problem of Polynesian Origins

In his highly suggestive monographs Dr. Handy tried to give and, we should say, succeeded in giving, " a comprehensive picture of the dimensions and factors in the problem of Polynesian origins." He starts from the island of Tahiti, which is admitted to be the centre of radiation of Poly-

nesian culture, to Hawaii in the extreme North and New Zealand in the extreme South. The Tahitians divide themselves into three classes : (1) The *Arii* or the landowning chiefs, (2) the *Raatira* or the landed proprietors, (3) the *Manahune* or serfs of the first two landowning groups, corresponding somewhat to the *Sudras* of India with no individual land right, and contemptuously spoken of as ' woodcutters, planters and eaters of fresh water fish.' Thus the Manahune, numerically the largest group, appears to have descended from an earlier population that dwelt in the island prior to the Arii conquest. The traditions in the neighbouring island of Raiatea, 130 miles north-west of Tahiti, preserve the record of an Arii conquest. The vanquished Manahunes of Tahiti show certain cultural traits typical of the Marquesans and the Maoris of New Zealand who represent the older type of Polynesians. The dress, social organisation, mode of warfare, dancing and skull-cult are considered to be the cultural traits of the earlier barbaric tribe. Whereas agriculture, arts and crafts, religion and lore are indices of a higher and later order of Indo-Polynesian culture. Few of the descendants of the Arii with a superior culture are unmixed, and they are supposed to be the dominant elements in the islands of Tonga and Samoa.

Dr. Handy attempted to trace also the relationship of these people of the mid-Pacific with the folks beyond the limits of Polynesia : " A line drawn around an area including India, South and East Africa, and Oceania, delimits a vast region throughout which there have been, probably from pre-historic time, racial and cultural drifts, a southward and eastward flow of Asiatic and westward and northward seepage of Oceanian elements. That Asiatic streams have reached Polynesia has been accepted as obvious since the earliest period of Polynesian research. In the account of Captain Cook's third voyage was published an appendix in which Polynesian words were compared with words from the Malay archipelago. From the beginning of systematic theorizing as to Polynesian origins, scholars have been led in this direction. Fornander Tregear, Percy Smith, Logan, Thilenius, Churchill, Dixon and others, have all pointed to Malaysia and the Asiatic main-land. As to the conception of the drift in the other direction, that of Oceanic and Polynesian influences westward and northward, this is somewhat more recent but evidence of this is accumulating in several places. The consenus of opinion of the anthropological group at the Science Congress in Tokyo (1926) was that the Ainus (aborigines of Japan) are of tropical Oceanic derivation. The French have discovered Melanesian remains in the caves in Tonkin. Recent studies of Smith, Mills, and Hutton in Assam and north-east of India seem to indicate that much of the culture of the Naga

tribes of this region is Oceanic. Hornell has indicated the presence of an intrusive Oceanic population on the coasts of western India and Ceylon, where today are seen the counterpart of the Polynesian single out-rigger canoe and distinctly Polynesian types and customs. It has long been established that the Hova peoples in Madagascar, who speak a language and have customs closely related to the Polynesians, sailed westward to their present home from Malaysia in historic times. The problem therefore again became more complicated, for in discussing this vast region of probable origins it is necessary to bear in mind the factor of *ancient* and *recent* Oceanic and Polynesian intrusions."

Archæology, although in its very early stage in Polynesia, is also helping to reveal the existence of certain pre-historic traits : (*a*) the shouldered celt of an old Polynesian form is found also in the Celebes, Kwantung, Indo-China, Burma and India; (*b*) the erect stones associated with shrines, certainly old Polynesian, are also found in Micronesia, Java, Assam and India. The primitive skull-cult and the men's hall or lodge exist, today as survivals.

In the historic age, we find that the Brahmanical civilization, mainly from the south or Dravidian India, entered Malaysia or Indo-China a little before the commencement of the Christian era. The populations that acquired Hindu Culture in Java and Indo-China were Mongoloid and Malayoid; those who brought the civilisation from India were Caucasians and Dravidians. Brahmanism, however, in this area absorbed so much of the aboriginal elements that often it is difficult to distinguish the pre-historic from the later Brahmanical. Dr. Handy in this connection refers to the following craft traditions : rites for the firstborn, the ancestral cult with its use of geneologies and images, phallic symbolism, priestly traditions and orders, walled temple with tower-like shrines, *Mana* and *Tapu*, the cults of Tane, Tu, Ronoo, and Tiki as symbolic figures, and, finally, the dualistic evolutionary cosmogony, probably derived from Brahmanism. Certain *Arii* cultural attributes are Brahmanical, while others are Buddhistic; and while some are Indian many seem to be of Chinese derivation. This is a complication which we may expect, because the influence of India and China (specially from the South) operated for centuries in this field as rivals. Among the Chinese legacies to the Polynesians we may mention : eating pig and dog, symbolism of the numbers 8 and 9, the fish turtle, lizard (as a modified form of the Dragon) and Heaven, head moulding, bleaching the skin, the split drum or gong, honorific titles and mythological parallels. Of the Indian legacies we may mention ethical social principles (probably Buddhistic), political and land systems, social classes and castes, sanctity of person,

etiquette, organised war on land, regattas, plankships and ocean-craft, guest-house, assembly halls, the costume-dance, drama and chorus.

According to Dr. Handy, the habit of talking of Polynesian migration in canoe should be abandoned; for the word canoe is not a correct designation for the large sea-going vessels which the Polynesians were building; Captain Cook measured a Tahitian Pahi with two pontoon hulls 110 ft. long. Next, although there may have been one or more periods of definite exodus from Malaysia (*e.g.*, at the time of the Muhammadan conquest) and also of the Maoris moving from Central Polynesia to New Zealand (13th-14th centuries), yet the normal process of peopling Polynesia was that of repeated occasional and accidental drifting through a period extending over several millenia. The old Polynesian language belongs to the Austric family spoken by the pre-Aryan peoples in India, Indo-China and Malaysia.

Lastly, although the American anthropologists generally discount the evidence of the crossing of the Polynesians to America and of the presence of Oceanic elements in North, Middle and South America, Dr. Handy, on the contrary, refers to the North-east Coast, the Gulf States, the Caribbean, Middle America and the Andes as " replete with Oceanic traits that probably derived from Malaysia and South Asia." (*Vide* Handy : *The Problem of Polynesian Origins,* Bishop Museum Occasional Papers, Vol. IX, No. 8, 1930).

III

To form a general idea of Pacific culture one must necessarily go beyond the limits of Polynesia. The geography, ethnography and the culture history of the Pacific is a matter of encyclopædic survey, and, with the expansion of scientific studies, we hope, an *Encyclopædia Pacifica* would be on the way to publication with the co-operation of American and other national institutions of the Pacific Basin. For the present, we must follow closely the publications of the various American institutions devoted to anthropology, archæology and natural history. An admirable general survey of the culture of Polynesia, Micronesia and Melanesia has already been published by the Field Museum of Chicago. A similar survey was successfully completed for the benefit of the general public and published as *Ancient Hawaiian Civilisation* (The Kamehameha Schools, Honolulu). Eminent anthropologists of the Bishop Museum, helped by their colleagues in different technical subjects, compiled this highly instructive and useful symposium on Polynesian culture : Dr. Peter Buck wrote on " Polynesian Migrations " and " Poly-

nesian Oratory;" Dr. E. S. C. Handy on " Polynesian Religion and Education," " Government and Society," and " Houses and Villages "; Kenneth P. Emory on " Navigation," " Warfare," " Sports and Games," etc., and also by his illustrated lectures on Hawaiian Art he is preparing the ground for a comprehensive survey with elaborate documentation. Prof. H. M. Liquiens of the University of Hawaii who writes on " Hawaiian Wood-Carvings " has already published an illuminating monograph on the subject, explaining the various forms and special technique of carving of the images of the Hawaiian deities which are so difficult to discover and identify today because the Hawaiians themselves burned them down in a sudden reforming zeal fanned by the missionaries who from 1820 tried vigorously to reclaim the souls of these heathen to Christianity. Many of the early missionaries, Protestants as well as Catholics, from Europe and from America, carried away many of these images and wood-carvings which, as regretted by Dr. Buck, could with difficulty be seen in obscure corners of many public and ecclesiastical museums which often refuse to co-operate even with the scientific organisation like the Bishop Museum by supplying photographs or other relevant information with regard to these rare documents of Polynesian religion, art and culture. India, China and other countries of the Orient have suffered similarly from such missionary zeal, and only very recently, with the development of the science of anthropology and ethnology, we are discovering how much we have lost of what might have helped us in reconstructing the history of religion and culture of our primitive races. A significant question has been asked in the concluding chapter of *Ancient Hawaiian Civilisation* : " Can Hawaiian Culture be preserved ? " With the rude impact of Modernism, most of the indigenous cultural traits are getting disintegrated or submerged like the Hawaiian race itself, which has recently been exhaustively studied by Dr. Romanzo Adams of the University of Hawaii in his *Inter-racial Marriage in Hawaii* (Macmillan, 1937). The University of Hawaii has taken the wise step of organising a systematic study and teaching of the rapidly disappearing Hawaiian language. This department is under Prof. Henry P. Judd, who is trying his best to keep up the interest of the rising generation in this highly musical language. His brother, Albert F. Judd, is an authority on the Hawaiian trees and plants, on which subjects he contributed articles. So Prof. C. H. Edmondson of the Zoology Department and Prof. H. S. Palmer of the Geology Department, University of Hawaii, contributed to the volume articles on " Animal Life " and on " Geology " of Hawaii. So Dr. Nils P. Larsen, M.D., Medical Director of the Queen's Hospital, Honolulu, and a scientist of international repute, finds time, in the

intervals of his busy professional life, to write on " Ancient Hawaiian Medical Practice." Mr. E. H. Bryan, Jr., Curator, Bishop Museum, contributes articles on the " Fibre Work," " Astronomy and Calendar " of the Hawaiians. " Hawaiian Agriculture " was treated by Juliet Rice Wichman, and her sister Edith Rice Plews contributed a valuable paper on " Hawaiian Poetry." These two cultured ladies are the grand-daughters of the late Hon. William Hyde Rice of the Island of Kauai who in his " Hawaiian Legends " preserved many valuable specimens of Hawaiian literature transmitted by oral tradition. Mrs. Plews utilized also the valuable works of Nathaniel Emerson, author of *The Unwritten Literature of Hawaii.* We quote from her paper two characteristic pieces : (1) A *Mele Ipo* (Love Song)—

" Fragrant the grasses of high Kane-hoa,
Bind on the anklets, bind !
Bind with finger deft as the wind
That cools the air of this bower.
Lehua blooms pale at my flower,
O sweetheart of mine,
Bud that I pluck and wear in my wreath,
If thou wert but a flower ! "

(2) A *Mele Kanikau* (Dirge or Lament) composed by Kamamalu, the wife of Kamehameha II, while she left Hawaii with her husband never to return :

" Ye skies, ye plains, ye mountains and great sea,
Ye toilers, ye people of the soil, my love embraces you.
To this soil, farewell !
Ye, land for whose sake my father was eaten by deep
sorrow—farewell ! alas ! farewell ! "

What a rich legacy of thought, beauty and music are transmitted to us by these simple primitive folks can only be appreciated if we approach them with the scientific outlook and human sympathy of anthropologists, one of whom very appropriately and forcibly sums up the case for preservation in the following words : " Perhaps the most worthwhile feature of our Hawaiian heritage deserving preservation, was a certain religious and philosophic aspect of the old cultural life. It is so subtle that it is difficult to define. The Hawaiian *mele* with its implications and its hidden poetic meanings underlying verbal composition of great beauty, are flowers of thought which lovers of the subtler beauties of Polynesian civilisation will never allow

to die. They, like the grand nature myths, are permeated with extraordinary philosophic ideas which have been admired for a century by scholars all over the world. But unfortunately the art of creating, or rendering these anew, is dying. The younger Hawaiians might help to keep this great art alive, and interest themselves in the intellectual achievements and attainments of their forefathers."

IV

The very isolation of the Polynesian people helped in developing a special character of thought, intensity of feeling and individuality of literary expression quite remarkable in the annals of unwritten literature. Kamehameha the Great (1737-1819), called by his biographer H. H. Gowen, the " Napoleon of the Pacific," was probably the last manifestation of Polynesian genius and also the last champion of the old order of military and heroic achievements and of the ancestral religion and culture. Privileged to visit his native island of Hawaii in 1937, exactly two hundred years after his birth, I found the atmosphere still surcharged, as it were, with the memory and glory of the great Hawaiian chief who, at the time of his death (May 8, 1819), entrusted the care of his ancestral War-god, Kukailimoku (Hawaiian Kārttikeya) to his son Liholiho who succeeded as Kamehameha the Second. When Kamehameha was a middle-aged man of 40, Captain Cook was on the way of re-discovering the Hawaiian Island (January 18, 1778). Even as late as that the Hawaiians were simple enough to take Captain Cook to their temple, the *Heiau* of Hikiau and there worshipped him as a god. Very soon Captain Cook was killed by the Hawaiians, and, as is well known, the attention of Western explorers, traders and statesmen came slowly but relentlessly to revolutionize the simple history of these isolated peoples. In 1792 Captain George Vancouver visited Hawaii and the next year Kamehameha came into personal contact with Vancouver who continued to help him in his struggle with rival chiefs. When in 1790 one-third of the army of his rival Keoua was destroyed by the eruption of the volcano Kilaua, Kamehameha celebrated his thanksgiving service by the building of the Puukohola Heiau. He brought a special *Kahuna* or soothsayer from the Island of Kauai, and under his instruction, as is reported, " chiefs of the highest degree and common natives worked side by side, and Kamehameha himself set the example of carrying stones to the building." Before his death in 1819 Kamehameha may have had some premonition of the deluge of reform that was about to sweep the old order away, and probably that is why when the priests insisted

upon human sacrifice he refused to obey. His son *Kamehameha the Second* for the first time sat down and ate with the women. The people looked on with astonishment, and when they saw that no harm came they shouted : " The tapus are at an end, and the gods are a lie ! " Orders were sent to all the islands to destroy the shrines and burn the idols. These affairs coincided with the appearance of the Christian missionaries, and the old order yielded place to new. Kamehameha the Second and his Queen whose song we have quoted above visited England (sailing from Honolulu, November 27, 1823, reaching Portsmouth, May 22, 1824) and both died of measles there. Their bodies were brought back to Hawaii by Captain Lord Byron, a cousin of the Poet. About half a century later, King Kalakaua, the last elected King before the disruption of Hawaiian monarchy, undertook a trip round the world, and this trip has a special significance, as would be made clear from his itinerary. The King and his party first went to San Francisco (January, 1881) and from there reached Japan where he received royal reception and became the guest of the great Emperor Mutsuhito Meiji. From Japan, the King continued his journey visiting China, Siam, India and Egypt, crossing thereby the entire Orient. He visited also the great capitals of Europe where he was received with the respect due to an independent monarch, and returned to Honolulu in October, 1881, by the way of the United States. He was the first King to complete a tour round the world, and, like the Japanese monarch, he was the first to send young men abroad, between 1880 to 1887, to England, Scotland, Italy, U. S. A., Japan and China. By sheer good luck I came into personal contact with Dr. F. W. Beckley, possibly the last surviving member of these returned students. He was a doctor and an ardent patriot who narrated to me, with the pathos of the representative of a dying order, how they caught the last glimpse of the last glow of Hawaiian culture in the rich harvest of songs which were produced by the poets in the reign of King Kalakaua. I was glad to learn that to a lady Hawaiian composer we Indians are indebted for the splendid Hawaiian hymn to the Himalayas which she composed when the King was returning after having visted the epic Himalayan landscapes. Such poetic songs were composed to entertain the favourite Queen of Kalakaua who stayed at home and who while waiting for her Royal husband's return was busy weaving a tapestry of music and dance into special commemorative *meles* (chants) and *hulas* (dances) which, down to this day are great favourites of the people, as I found in course of my tour through the islands. Thus the last Hawaiian King, through the Himalyan chant, brought the Hawaiian and the Hindu souls together.

AN ODE TO THE SUN—KALAKAUA

IA OE E KA LA E ALOHI NEI

" Ia oe e ka la e alohi nei ma na welelau o ka honua
E hoike ana i kou nani i ka malamalama oi kelakela
Nau i nowelo aku pau na palipaa i ka ike ia
Ike oe i ka nani a o Himela i ka hene wai olu nawe malie
Ka mauna i lohia me ke onaona kiekie ai o Kalani noho mai iluna
Nau i a'e na kapu o Kahiki oia mau alanui malihini
Au i olali hookahi ai hehihehi ku ana i ka huku ale
I ke kai hala' i Iana malie kii'na iana pae moku
I hoa kuilima nou e Kalani o ka lama o ke ao kou kokua
O ka hoku loa no kou alakai lilo ai mea ole na enemi
Lehelehe eueu hana lokoino
E ola o Kalani a mau loa a kau i ke ao malamalama
Haina ka inoa i lohe ia o ka hiki kapu o na lani."

TRANSLATION

" An ode to thee, O *Sun,* which shineth to the uttermost ends of earth, Causing thy ever bright light to reflect the *glory* in beauteous splendor :—

Thou hast seen the sacred heights of those majestic cliffs
Midst the eternal solitude of the Himalayas and the frozen lake on the bosom
Of those lofty mountains famed in song and story that stand like grim sentinels
O'er their sweet-scented sandlewood forests which feed the fires of the hidden temple;
Where thou, our island king, reached thy goal with India's elect as thy companions.
Thy audacity and priestly inheritance enabled thee to overcome their prejudices
And pass beyond the taboo barriers of *Kahiki* towards that highland monastery
As ye were led along the narrow, forbidding and breath-taking path
Which thou alone of all alien lands were ever permitted to trod by zealous guards.

Thou hast stood on the crest of glistening wavelets of the frozen sea
Which lay below His temple in that upper world whose existence only the Elect know.
Thither thou wast led by priest of that upper realm to meet thy holy fate.
The snow-white fleecy clouds overhead were thy canopy on that solemn journey
The morning star the only light to guide thy footsteps lest thou meet mishap.
Until thou stood before the sacred fires and inhaled the fragrance of sandalwood
In that holy temple where thy royal lips were sealed in secret oath as an " elect "
Silencing forever all secret murmurings and objections of your opponents.
Long live, O royal " elect, forever more " for in that *realm of eternal light*
Will thy name henceforth be found enrolled, thou seventh of our secred monarchs."

NOTE :—The English translation given above follows the traditional version rather than the literal to bring out the beauty and correctness of the seer's vision that the unknown facts surrounding the initiation of the King as an "elect" by the Brahman brotherhood of India's hidden and most sacred temple may be known to his own people.

The above chant was composed by a cousin of Queen Kapiolani, wife of Kalakaua, while the King was in India on his world tour of 1881. This aged composer was a seer and prophetess of the old school who lived on the Garden Island, *Kauai o Mano* whence she issued the chant before the King's return or when news from him had been received by his Queen, or subjects.

"*Sun*" is symbolic of the King who is the light of his people.

The nam e *Kalakaua,* or "*day of fighting*" was a prophetic name in that after Kalakaua became King, his reign was marked by turmoil and struggle. The word *La* (sun or day) used here as pun.

Glory—as the sun shineth everywhere its rays travel, so is likened the King's itinerary from one country to another reflecting, wherever he went, his Kingly dignity, his education and his modern accomplishments.

Kahiki—that foreign land, India.

Realm of Eternal Light—upper regions of the Himalayas where the Brahman brotherhood dwells.

Translated by Dr. Frederick W. Beckley, Honolulu and communicated by Mr. C. W. Kenn of Honolulu.

Such serious contact apart, there was a serio-comic interlude of academic warfare over Indo-Polynesian relations, that was waged in the very year that I was lecturing at the University of Hawaii. In some of the islands

we find, more as exceptions than common features, dressed stones, enormous erect slabs and other specimens of stone architecture. In some places we find peculiar designs, carved into the stones, which have been studied by the expert archæologists of the Bishop Museum. These petroglyphs apart, we find on some stone slabs peculiar incised characters which appear to be some forgotten scripts of a bygone age. They tempted premature archæologists to imaginative interpretations, as we find in the case of Park Harrison who gave a most fantastic deciphering of the so-called pre-historic scripts on the tablets of Rapa Nui or Easter Island, the farthest of the Polynesian group facing South America. A most extravagant translation of the tablet was offered by Carrol in the Polynesian Society Journal where he stated that " the Easter Islanders were Peruvian immigrants who escaped from America with a script which he deciphers with the greatest ease." In 1932, the problem of the Easter Island tablets again loomed into the limelight when it was considered solved by the Hungarian scholar Hevesy Vilmos (Guillaume de Hevesy) who presented to the French *Academy des Inscriptions et Belles Lettres* a paper in which he attempted to connect the Easter Island tablet signs with those of the script then recently discovered on the well-known seals found among the ruins of two early centres of Indian culture—Mohen-jo-Daro and Harappa in the Indus Valley. In 1933, Hevesy published a paper " Sur une ecriture oceanienne paraissant d'origine neolithique " in *Bulletin de la Société Pre-historique Française, Nos. 7* and *8*. Labouring under the delusion of discovering the pre-historic script of Oceania, Hevesy ventured to point out that in many of the characters of the Easter Island tablets and of the Indus Valley script he could read analogous as well as identical characters. He felt that he could attribute that script to a neolithic civilisation which the Polynesians (who are known to be connected with pre-historic India) imported to the Easter Island in the course of their migrations. Hevesy also wrote two articles on " Oceania and Pre-Aryan India " and " Mohen-jo-Daro and the Easter Islands " *in Bulletin de l'Association Francaise des Amis de l'Orient Nos. 14-15* (*Cf.* E. Denison Ross, *India and Easter Island—Similarity of Early Script*, in *The Times*).

While I was leaving Hawaii, Dr. Alfred Metraux, a French-Swiss scholar of pre-historic studies, was reading a paper at the Honolulu Academy of Arts exposing the hollowness of the contentions of Hevesy. Dr. Metraux was trained in France and also has to his credit years of field work in South America and in Polynesia. So his pronouncements must be accepted with due consideration; and for the benefit of Indian scholars and for all those interested in the problem of pre-historic script of India, I conclude this

section with the summary of Dr. Metraux's paper, which he very kindly handed over to me :

1. A great number of the analogies between the two scripts exists only in the reproductions of Hevesy, failing to appear when the original signs are compared. His similarities result from small " adjustments " (changing of proportions, obliteration of small details, misrepresentations, and so forth).

2. The general method used by Hevesy is scientifically inadmissible. For his comparison of the two scripts he chooses arbitrarily from the thousands of Easter Island signs. He selects small variations which appear once or twice, paying no attention to the usual forms of the sign. He does the same with the Indus script.

3. Hevesy has made no attempt to show whether a sign is an exception or a variant or whether it occurs repeatedly. As a matter of fact, most of his examples are taken only from insignificant or rare signs. He has not been able to show any convincing correspondence between the most common and characteristic signs of the two scripts. Hevesy, like the amateur linguist, compares two languages by putting together isolated words with their suffixes, prefixes, and so on without going to the roots or to the grammatical categories of the language. His method has been eliminated by science for a long time, though amateurs still indulge in the sport.

Hevesy has failed to explain how two scripts separated in time by 4,000 years at least, can present minute and complicated resemblances in trifling details and at the same time be so completely different in all the essential elements.

Hevesy realized that it was too much to expect us to believe that Easter Island could have preserved for a minimum of 4,000 years an unaltered script. Four thousand years is a comparatively short time, since Hevesy considers the Easter Island script more archaic than that of Mohenjo Daro. If one agrees with Mr. Hunter that the Mohenjo Daro culture may have started in 4,000 B.C., the interval would be over 6,000 years. To span this time Hevesy submits the curious theory that these tablets were taken to Easter Island by its first immigrants, who guarded them carefully during hundreds or thousands of years without either destroying them or knowing their meaning. Hevesy supports this hypothesis by a tradition reported by Thompson in which King Hotu-matua, the first settler, brought with him 67 tablets. For Hevesy, these 67 tablets were the only ones in existence. We may acknowledge another tradition according to which Hineriru, one of the first immigrants, brought the original symbols on paper (?) " . . . when the

paper was done, their ancestors made them (the tablets) from the banana plant, and when it was found that it withered they resorted to wood." Hotu-matua brought many things, according to the legends—even cattle. But Thompson, whom Hevesy quotes, gives conclusive evidence that the script was known and written by the natives until at least 1863.

To check the hypothesis of Hevesy, analyses were made of the wood of several Easter Island tablets. The laboratory investigations have refuted Hevesy's hypothesis. The analyses show that the following woods were used for the tablets : *Lauraceae, Myrtaceæ, Fraxinus excelsior, Thespesia populnea, Podocarpus latifolia, Pyrus malus.* The beautiful tablet called the " Oar " was engraved on a European oar of *Fraxinus excelsior,* a European wood much used for making oars. The authenticity of this tablet, which is in the Museum of the " Congregation des Sacres-Cœurs de Picpus " at Braine-le-Comte (Belgium), has never been questioned, even by Hevesy. " The age of the Easter Island tablets made of wood is totally unknown," writes Professor Langdon. The age of the best one, at least, is known to date from the end of the eighteenth century or the first half of the nineteenth century A.D. This tablet is the largest one and one of the purest in style. It was collected by the missionaries about 1867 or 1869, at a time when natives paid little attention to them. The climate of Easter Island is essentially wet, and tablets of wood could not have been kept for centuries in rain-drenched, thatched huts, much less in caves. How then could these tablets have been saved for thousands of years of migration and war and come to us in the form of a modern European oar ?

VII

The Indian Ocean and the Pacific—A Cultural Ebb and Flow

Antiquarian studies are often punctuated by fantastic theorisings which may be wrong in detail and yet may be right in their implications. At the conclusion of our section on Polynesia we beg to emphasise once more, as we have done in our previous sections, the fact that there are no frontiers on the Oceanic field and that cultural migrations from the Indian Ocean to the Pacific and back are as true as the tidal waves and the deeper oceanic under-currents. Ever since the formulation of the hypothesis of a fairly common Austric linguistic peculiarities, scholars have been trying to chart anew the submerged continent of culture represented by the Kols or Mundas of India, the Mon-Khmers of Indo-China, the Australoid races and the Polynesians, reaching right up to the confines of pre-Columbian culture

of the two Americas. The pre-Aryan and the pre-Dravidian questions of India have been handled by eminent scholars like Sylvain Lévi, Jean Przyluski, Jules Bloch and others. They have been ably supported by Indian scholars like Suniti Kumar Chatterji and Prabodh Chandra Bagchi. Sometime ago, Paul Rivet attacked the problem from a new angle. In *Annales de Geographie* (1926) he contributed a paper on " The Role of the Oceanians in the history of the Peopling of the Globe and of Civilization." He followed that up with a paper " Sumerians and Oceanians " published by the Linguistic Society of Paris (Vol. 24, 1929). He pointed out several analogies between the Sumerians and the Austro-Asiatic languages of Asia, basing his thesis on the relations of Mesopotamia and the Indus Valley from the third millennium B.C. Rivet is convinced that the domain of the Sumero-Oceanic languages extended from the Mediterranean to America and from Japan to Tasmania, forming the most ancient linguistic substratum of those countries. Archæology and anthropology came to throw new lights on this problem and we find the conclusions ably summarised in a paper, contributed by Robert Heine-Geldern of Vienna on the Chronology of the Neolithic Culture of South Eastern Asia (*Homage to P. W. Schmidt*, Vienna, 1928). The author succeeded in co-ordinating the neolithic cultures of Indo-China, Assam, Orissa, Chota-Nagpur, Formosa and Japan. So Victor Christian in his *Die Beziehungen der altemesopotamischen kunst zum Osten* (WBKA, 1926) stated clearly that, in the Copper Age, civilisation was fairly homogeneous in the entire Orient from the Mediterranean to China. According to him, ethnic migrations commenced in the neolithic epoch and explained numerous analogies in the art of Mesopotamia, India and China. Lastly, a most valuable link in this chain of arguments was furnished by the painstaking researches of James Hornell who published his monograph *The Origin and Ethnological Significance of Indian Boat Designs* in the " Memoirs of the Asiatic Society of Bengal " (Vol. 7, 1920). He followed it up by publishing in collaboration with A. C. Haddon, the *Canoes of Oceania* (Bishop Museum Memoirs). The Boat Designs of the Nile and the Tigris, of the Indus and the Ganges, of Indonesia and Oceania are veritable landmarks in the unfolding of this forgotten chapter of human cultural collaboration.

CHAPTER IV—*Contd.*

CULTURAL ORGANISATIONS OF HAWAII

The University of Hawaii

THE Hawaii Islands (20 in number, of which only 8 are inhabited) were annexed to the United States (Aug. 12, 1898) about a year before the acquisition by the U. S. A. (April 11, 1899) from Spain, of the Philippines, which brought America to the very heart of the Orient. At the end of the first decade (1898-1908) we find the foundation of the University of Hawaii with 5 students and 12 faculty members or 2 instructors per student. In 1937, when I had the privilege of joining the University Faculty, the teaching staff rose to 256 and the student body to nearly 3,000. The nucleus of the University was the College of Hawaii, which started conferring B.A. degrees from 1910 and B.Sc. from 1914, when the cost per student was over 1,600 dollars. The College was raised to the rank of a University in 1920 and, with the consequent increase in enrolment figures, the cost per student had been cut down to less than half, *i.e.*, 700 dollars and in 1927 to 450 dollars per student. Addition of new departments and divisions of research kept pace with the growth of the University. To develop mental tests in that wonderful ethnic laboratory of Hawaii, the Legislature established in 1921, the Psychological and Psychopathic Clinic, now under Prof. Dr. Porteus, who joined the University, coming from Australia. In 1924, the University undertook the management of the experiment station of the Association of Hawaiian Pineapple-canners. The Engineering group was reorganized in 1928, and the Territorial Normal and Training School was affiliated to the University, which developed, in 1931, the regular Teachers' College. The University co-operates with the big Sugar Trusts, which maintain some of the best experts, researchers and laboratories on Sugar Technology, attracting numerous students from America, China, Japan and even India. The late Dr. Upendrakumar Das, D.Sc. (Minnesota) earned golden opinion as a researcher at one of the biggest Sugar Experiment Stations in Honolulu. In the students' roll of the University, I found several Indian students of sugar technology, from Bombay, U. P. and Behar.

The Oriental Institute of the University of Hawaii

The Chinese and the Japanese Departments working over a decade, were integrated into the Oriental Institute in 1935 with Prof. Gregg M. Sinclair as Director. He started developing contacts with the academic groups and the thought-leaders of the Far East and came twice to India—the fountain-head of Far Eastern religion, philosophy and culture. He met Dr. Syamaprasad Mookerjee, the then Vice-Chancellor of the University of Calcutta and secured my services to act as the First Visiting Professor of Indian history and culture in 1937. For the first time an American University was thus seen to take the initiative in understanding the peoples and cultures of India and the Living Orient and not merely their mummified prototypes deposited in museums. The University of Hawaii, ministering to the needs of a population* largely " Oriental," has naturally been trying to develop through the Oriental Institute, a special research department for the study of the living languages and cultures of the principal nations of the Orient starting with China, Japan and India. Many of the leading cultural organizations of China and Japan have been sending valuable books, and the Sino-Japanese Library of the University appeared to me to be splendid. Competent teachers and professors of Chinese and Japanese nationality conduct regular classes on their respective cultures throughout the year and the public take keen interest in them. Let us hope that India through her big Universities and research centres would similarly co-operate with the Oriental Institute of the University of Hawaii. To begin with, all important books, written by Indian authors on diverse problems of India, may be sent as friendly gifts to the University Library in order to develop gradually its Indian section. The generous gift of the entire publications of the University of Calcutta presented through its former Vice-Chancellor, Dr. S. P. Mookerji, was thankfully received and acknowledged by President D. L. Crawford at the 30th Jubilee Celebrations of the University (March 22-27, 1937). Other Indian universities and learned societies may extend similar courtesies and cultivate cultural relations with the University of Hawaii for their mutual advantage. Both President Crawford and Prof. Sinclair are deeply interested in developing direct relations with the scientific and academic world of India. I am deeply grateful to them, for they spared no pains to

* Out of a total population of 393,277, we find, according to the latest (1936) estimate, 149,886 Japanese, 53,550 Filipino, 29,863 Portuguese not considered Caucasians, 27,495 Chinese, 21,594 Hawaiian, 18,271 Asiatic Hawaiian, 19,319 Caucasian Hawaiian, 567,069 other Caucasian, 6,682 Korean, 7,470 Puerto Rican and 1,261 Spanish.

enable the cosmopolitan public of Hawaii to profit by my courses of lectures, which were attended not only by the professors and students of the University but also by the *elite* of Honolulu. Mrs. Mary Dillingham Fear (wife of the former Governor) and Prof. Charles Moore, Mrs. Crawford (wife of the President) and Prof. W. T. Chan, Mrs. Castle and many distinguished writers and artists, regularly attended my lectures, which, after the semester, were extended to the Summer session, where I was privileged to meet in my classes, many experienced teachers from other islands and also from the mainland of America. I was glad to note before my departure that the University of Hawaii was getting ready to convene the first " East and West Congress of Philosophy " in the Pacific world. Prof. Sinclair is energetically backed by Prof. Dr. Charles Moore in this noble project.

The Honolulu Academy of Arts

Founded in April, 1927, the Academy completed the first decade of its existence when it invited me to deliver a series of lectures on the " Art and Archæology of India." It owes its existence to the munificence of Mrs. Charles M. Cooke, whose beautiful dream is expressed in the following pregnant paragraphs :

" That our children of many nationalities and races, born far from the centres of art, may receive an intimation of their own cultural legacy and wake to the ideals embodied in the arts of their neighbours, that they may grasp that composite heritage accumulating for the new generations of Hawaii;

That Hawaiians, Americans, Chinese, Japanese, Koreans, North Europeans, South Europeans, and all other peoples living here, contacting through the channel of art those deep intuitions common to all, may perceive a foundation on which a new culture, enriched by all the old strains, may be built in these islands;

That it may contribute to such understanding and mutual respect, the Honolulu Academy of Art, opens its doors to this community so situated that it calls East the West and West the East, perhaps in happy continuance of that ancient Polynesian custom of exchanging the names of close friends."

A special feature of the Museum's activities has been that of public education through the observance of national festivals with appropriate art exhibits, dance and music. The Chinese Moon festival, the Japanese Boy Day, the Korean Spring festival, the Filipino folk dance, among others, attracted thousands of men and women of different nationalities developing

spontaneously a sympathy for and appreciation of the deeper emotional and cultural life of nations. It is significant that over half of the entire collection of its Museum is oriental, chiefly Chinese and Japanese with a few Indian pieces also. A couple of years ago a loan Exhibition of Indian art objects from America was organized by the Academy with the expert help of Dr. A. Coomaraswamy. So when I opened my course of lectures on " Indian Arts and Crafts," I was agreeably surprized to find numerous friends of India in Honolulu, who followed my courses with close attention. Dr. C. M. Cooke, and Mrs. Philip Spalding, the son and daughter of the late Mrs. Cooke, received me warmly and Mr. Edgar C. Schenck, the energetic Director and his talented wife Mrs. Dorothy Schenck, Director of the Educational Department of the Academy, were most friendly to me. Through them I came to know the quiet little group of devoted workers at the Academy : Marion Morse, the Librarian, Alyce Hogs and Marvel Allison, assistants in art education, among others who helped me in every possible way to make my lectures and illustrations as attractive as possible. Through my lectures at the Academy I had the privilege of knowing many American and European artists interested in India and her epic landscapes, among others, the renowned musician, Mr. Fritz Hart, Director of the Honolulu Symphony Orchestra.

The Bishop Museum

Bernice Pauahi Bishop, a Hawaiian Princess, born in 1831, was the great-granddaughter of Kalaniopuu, King of the Island of Hawaii at the time of its discovery by Captain Jones Cook. She married Charles Reed Bishop in 1850 and he founded, after her death, in 1889, the now famous Bernice P. Bishop Museum. Its first Director, Dr. W. T. Brigham (1898-1918), patiently watched over the collection of, and publications on, Hawaiian antiquities : feather work, mat and basket weaving, carving, bark cloth, stone implements, etc. Dr. H. E. Gregory was the second Director (1919-36) whose services were loaned to the Museum by the Yale University which maintains a most fruitful and friendly collaboration between their Faculty and the Museum experts. Dr. Gregory organized several expeditions into Polynesia and was made President of the first Pan-Pacific Scientific Congress of Honolulu in 1920. The regional survey of the various island groups comprising Polynesia was nearly complete when Dr. Gregory retired but before that he had the satisfaction of sending the reputed author of *Polynesian Religion*, Dr. E. C. Handy, ethnographist to the Bishop Museum, as its delegate to the All-India Science Congress of 1928 held at

our University of Calcutta. Dr. Handy, with the intuition of an expert ethnologist, discovered soon that to understand some aspects of the "Polynesian Origins" (*Vide* Bishop Museum, Occasional papers Vol. IV, No. 8, 1930) one cannot help turning to India. He procured a research fellowship for our late lamented friend and colleague Dr. Panchanan Mitra and he returned to India saturated with Polynesian lore. He started publishing a series of articles in "Man in India" (1931-32) but was snatched away by the cruel hand of death at the very prime of his life. His death was regretted by many of his friends of Honolulu, especially of the Bishop Museum group, whom I often met during my stay at the University of Hawaii. The University keeps close contact with the Bishop Museum for research work and I was deeply touched by the uniform courtesy and co-operation shown by its veteran Director, Dr. Peter H. Buck, and K. P. Emory, Dr. A. Metraux, Mr. E. H. Bryan and other scholars. Dr. Buck hails from New Zealand and is proud of his Maori heredity, which he proclaims through this name Te Rangi Hiroa and he is trying nobly to develop the activities of the Museum, extending it outside the limits of Polynesia proper, now that the general survey of the Polynesian group is complete. Our friend and colleague, Dr. B. S. Guha of the Indian Museum, keeps in touch with the anthropologists of the Bishop Museum and I hope that other Indian scholars and research institutions would exchange their publications with this premier research laboratory of Polynesian culture in the North Pacific.

India in the Cultural Associations of Honolulu

The *Anthropology Club* of Honolulu is a fine organization which meets regularly to discuss fresh problems and it invited me to give them a talk on "Man in India." So I was often requested to discuss the Sociological problems of India, at the meetings organized by the members of the *Sociology Club*, functioning in collaboration with the Department of Sociology of the University, under the able guidance of veteran scholars like Dr. Romanzo Adams and Prof. Felix Keesing. Dr. Adams has recently published an exhaustive study on the "Interracial Marriage in Hawaii" (Macmillan & Co., 1937) and he is deeply interested in the ethnic problems of India. Dr. Keesing is an indefatigable worker in the field of Pacific studies. He explored, with his talented wife, also a qualified sociologist, the primitive zones of the Philippine islands, publishing a book and many articles and monographs of outstanding merit. He also piloted the Pan-Pacific Educational Conference (1936) where he met Dr. Kodanda Rao of the Servants

of India Society and helped him in disseminating correct information about the educational life of India. The *Report* of the Conference carefully edited by Dr. Keesing and published by the Institute of Pacific Relations, has proved to be of great interest to the educationists of India and other countries bordering on the Pacific.

Two other associations of major importance are the *Pan-Pacific Union* and the *Institute of Pacific Relations.* The former is working for years, like an international Rotary for the Pacific World holding meetings, reunions and fostering cultural relations and good neighbourly policy. The Institute of Pacific Relations, on the other hand, is working as the major research organisation of the Pacific basin publishing a journal *Pacific Affairs* and also data papers for periodic conferences and other valuable studies into the economic, social and political life of the nations bordering on the Pacific. Mr. Carter, the Secretary-General of the Institute was attached to the Calcutta Y. M. C. A. before the last war and I was glad to greet him again in Honolulu. Founded originally in Hawaii, the headquarters of the Institute of Pacific Relations was transferred to New York but the Pan-Pacfiic Union continues to function from Honolulu, as its centre, publishing an illustrated magazine called the *Pan-Pacific.* Both the *Union* and the *Institute* welcomed me to participate in many of their proceedings. India came to have her legitimate representation in the Pan-Pacific Union, when I had the honor of being invited to serve as one of its Honorary Trustees and I had the pleasure of meeting several members of the Pan-Pacific Union in course of my cultural tour (1938) through Australia, New Zealand and the Philippines. Through Mr. Charles F. Loomis, Secretary to the Institute of Pacific Relations, I was introduced to the members of the various groups of this remarkable organization devoted to Pacific research. In view of the projected " East and West Congress of Philosophy " to be invited to Honolulu, I was requested to participate in a symposium on " The Eastern and Western Thought," led by Prof. Dr. Charles Moore of the University of Hawaii and sponsored by the Institute of Pacific Relations, under the presidency of Dr. A. L. Dean, a former President of the University. Few can argue with impunity today that the Pacific and the Indian oceans are but very remotely connected, for India is fast being drawn into the vortex of the Pacific problems.

Appendix B.

BERINCE J. BISHOP MUSEUM COLLECTIONS

A memorandum prepared for Dr. Kalidas Nag by E. H. Bryan, Jr., Curator of Collections.

Bernice Pauahi Bishop Museum was found in 1889 by Charles R. Bishop as a memorial to his wife, a Hawaiian Princess of the Kamehameha line. The nucleus of its collections consisted of the store of kapas, mats, calabashes, kahilis, and other ornaments and relics which belonged to Mrs. Bishop, most of them having been bequeathed to her as the last of the Kamehameha line. To this was added, by bequest, the native treasures of Queen Emma; and, by purchase, extensive private collections. The Hawaiian Government deposited in the Museum, the collections formerly known as the Government Museum. More recently, by legislative act, the Museum has been made the official depository for Territorial Departments, and numerous scientific specimens, especially from the University of Hawaii, are housed in the Museum and made available for study.

There was a slow but steady growth during the period to 1918, under the first Director, the late Dr. William T. Brigham. He planned and arranged the exhibition halls, much as they are today. From 1919 to 1936, under the direction of Dr. Herbert E. Gregory, the Museum undertook extensive field collecting and research. A regional survey was made of the anthropology of Polynesia. Generous donations from foundations and individuals have made it possible to send parties to most of the island groups of Polynesia. These have studied the native culture and have brought back to the Museum large numbers of specimens. Botanical and Zoological surveys have been made in several island groups of Polynesia, especially Samoa, the Marquesas, Society, Austral Tuamotu and Cook Islands, Fiji, and Hawaii. The land flora and fauna has been stressed, as this is changing more rapidly than life in the sea, due to the deforestation of the islands, and the inroads of foreign plant and animal life. Insects and land shells, which were least known among the important groups of animals, especially have been collected. In carrying out this work hearty co-operation has been received from scientific institutions both in Hawaii and elsewhere. There is close affiliation with Yale University, one important result of which has been a series of fellowships which have made it possible for students and specialists to undertake research in the Pacific, the results of which have come to the Museum.

The scope of the Bishop Museum is confined to Polynesia and closely related regions, in branches of Anthropology, Botany, Zoology, and History. Polynesia is defined by the Museum as the triangular area between Hawaii, New Zealand, and Easter Island. Because the Polynesians, and much of the plant and animal life, entered this region from the West, the Museum is also interested, at least for the sake of comparison, in Micronesia, and parts of Melanesia. Some of the branches of its interest also require comparisons with the Malayan region and parts of Southeastern Asia.

The extensive exhibition halls contain but a small per cent. of the Museum's collections. The bulk of the study material is housed in two three-storied fireproof

buildings and the ground floor of one wing of the exhibition halls. The study collections are available to qualified students, but are not open to the general public. They are so arranged and so catalogued that every specimen may be readily located and made accessible.

If one is interested in numbers of specimens, the following summary may be of interest. The ethnological specimens require 31,000 catalogue numbers. This does not represent the total number of ethnological specimens, for in some cases several similar specimens may have been grouped under one number, and specimens on loan are catalogued separately. There are probably 40,000 specimens which illustrate the material culture of the Pacific islanders. The herbarium contains over 150,000 sheets of plants from Pacific islands and Australia. Many thousands of duplicate specimens have also been sent in exchange to other herbaria. The zoological collections contain 6,000 birds, 4,000 fishes, 500 casts of fishes, and several thousand other marine animals. The rapidly growing insect collection will soon number a quarter of a million specimens. The collection of Pacific island land-shells is estimated to number 1,500,000 specimens, and there are several thousand marine shells. There are about 1,000 skulls in the Physical Anthropology collection.

Mere numbers of specimens mean very little without accompanying scientific data. These are carefully recorded in bound catalogues, with card catalogues, systematically arranged for ready reference. In some departments, the recording of information has gone beyond our own collections, and card catalogues are maintained of all recorded insects, land shells, and plants in Polynesia and related regions.

The scientific results of the Museum's work have also been published in 145 Bulletins, 12 Volumes of Memoirs, 12 Volumes of Occasional Papers, and 30 Special Publications. The Museum Library contains 17,500 volumes, 10,700 pamphlets, numerous maps, about 20,000 photographic negative, more than 350 phonograph records of native chants and music, and a small collection of motion picture films. Most of these specialize on the Pacific. The ethnologists are attempting to assemble photographs and descriptions of important Polynesian ethnological specimens preserved in other museums. These, having in many cases been collected many years before the founding of Bishop Museum, and being now unobtainable, will greatly augment our own collections and facilitate comparative studies.

Scientists and qualified students are always welcome to make use of any facilities at the Museum. It is also possible for other scientific institutions to borrow specimens for scientific study. The following method is used by the Museum to get the natural history results of expeditions worked up. The specimens are sorted into taxonomic groups, and these are loaned to specialists actively working on these groups. The specialist identifies the specimens, and, if it seems desirable, prepares a manuscript on the results of his study. In return for his work he is allowed to retain a series of duplicate specimens where these are available. The Museum publishes the manuscript and distributes duplicates to other institutions, thus making the scientific results available to science. The Museum is glad to get in touch with specialists interested in various groups of plants and animals in Polynesia.

Bishop Museum, Honolulu, 1937.

CHAPTER V

THE PEOPLES AND CULTURE OF THE PHILIPPINES

THE Philippine Islands were discovered by the famous Portuguese navigator Magellan (Magelhæs) who rounded the whole of South America, passed (28th November, 1520) through the Strait named after him, and after three months of most trying voyage across the Pacific reached Micronesia. He landed in the Philippines on the 16th of March, 1521, and tried to conquer the Islands by diplomatic alliances with the rival factions till he was killed while fighting a native chief of Mactan (near Cebu). Sixty years after, in 1581, the Spanish General Legaspi managed to conquer the Islands which came to bear the name of the Spanish King, and for over three centuries after that the Spanish language and culture dominated over the indigenous Malayan language and culture of the islands. In 1898, with the termination of war between Spain and U. S. A., the Filipinos came to be American subjects and English language began to replace Spanish.

Amidst all these political and cultural vicissitudes we must remember that the Filipinos are Asiatics and that their history is intimately connected with that of the mainland of Asia with which the Philippines were connected by land (like England with the Continent) towards the end of the Old Stone Age, some 25,000 years ago (*Vide* Keesing : " Who are the Filipinos ? "— *Mid-Pacific Magazine*, January-March, 1936). Prof. Felix M. Keesing through many of his valuable contributions has thrown light on the dark problem of the Filipino origins. The earliest migrants were the Negritos, a black pigmy race which probably came across the land bridge which, later on, was engulfed by the sea and the Philippines became a floating triangle of more than 7,000 islands which came to be visited by a second race, the Indonesians or Proto-Malays. They were a tall brown-skinned people, experts in navigation, who in their canoes visited the islands towards the end of the New Stone Age (about 5000 B.C.). Some of them came from Indonesia (or modern Dutch Indies), and some from Indo-China. A few centuries before the Christian era the third race, the Malayans, came by the way of Borneo from Java and Sumatra, where, as we know, pure Hindu culture came to dominate, about the beginning of the Christian era. With Hindu culture gradually came the Sanskrit languages which has influenced very largely Tagalog, the *lingua franca* of the Philippines. The

Chinese and the Arabs also came in due time, adding new elements to the composite culture of the Filipino people. With the conquest of the Spaniards, the vast majority of the Filipinos were converted to Roman Christianity and to some occidental manners and customs; but more than a million resisted conversion, and about half of them live in the southern zone known as the Moros, who are Muhammadans.

An interesting paper by Mr. Alber W. Herre of the Stanford University, U. S. A., gives us important clues with regard to the " Sources of Philippine Culture " (*Mid-Pacific Magazine*, January-March, 1936). Mr. Herre opens his survey with the movement of the dwarfish Negritos or Aetas, who were food-gatherers of the most primitive type who reached the Philippines by the lost land bridge. The next were the Indonesians, an early Caucasic brown folk who came in their canoes. They passed through Indonesia and the Sulu Archipelago to Mindanao and through Palawan and the Visaya group of islands to Luzon, and even beyond to Formosa and South Japan. These Indonesians speaking dialects of the Austric group belonged to the Neolithic Age (*circa* 10,000-5,000 B.C.) and brought with them rice, banana, cocoanut and other food plants. They were expert fishermen and builders of canoes (*barangays*) and knew a kind of rude clay-pottery. They were the pioneers in farming (*caingan*) and in raising upland rice.

Then Mr. Herre draws our attention to the discovery of archæological sites which belong to the Early Iron age but which, according to him, are partly derived from the Chalcolithic Culture of India. Human settlements have been discovered on the hills of Novaliches, to the north-east of Manila and also along the north coast of Laguna de Bay. The tools and weapons of these people were made out of the obsidian stone from cliffs on the north side of the lake. A similar settlement and a quarry have been found to the west of the town of Lipa in Batangas province. Thousands of artifacts have been discovered and are being carefully preserved by Prof. H. Otley Beyer who kindly showed them to me while I was lecturing in Manila as a guest-professor of the University of the Philippines. Prof. Beyer is a firm believer in the cultural relations of India and the Philippines from the prehistoric days, and Mr. Herre, following him, also made the following significant observations :

" From these we know that they (the Indonesians) derived their primary culture from India, Mother of Nations. From the Novaliches burial urns are obtained green glass bangles exactly like those figured in the Reports of the Indian Archæological Survey and made at least 5,000 years ago. . . . . Even in those far off days there was an interchange of commodities (glass and stone jewellery, beads, ear-plugs, ornaments, etc.) from tribe to tribe and island to island. . . . . Somehow the art of writting was also brought from India, and was

known to most of the Philippine tribes until it was wantonly destroyed by the Spanish priests. Now the ancient writing survives only among the Pagan Mangyans of Mindoro and the Bataks of Palawan."

In the first millennium B.C. fresh waves of migrants pushed back the Negritos as well as the Indonesians and many tribes like the Igorrotes moved into the hills as did the Ifugao who developed a marvellous system of rice terraces to grow lowland rice in the high mountains. This third group of invaders were a mixed race, the Mongoloid or Continental Malayas who brought with them the cultivation of lowland rice, bamboo, mangoe, chicken and the *carabao* or buffalo.

Towards the beginning of the Christian era, Chinese traders and pirates began to appear and through them came iron, glazed-pottery, porcelain, huge and beautiful jars, lovely beads, silk and delicate cloth. This Chinese penetration was interrupted by the conquest of entire Malayasia by the great Malay empire of Sumatra or the Indo-Malay empire of Srī-Vijaya which held the Philippines for about 150 years and which was replaced by the Indo-Javanese Madjapahit empire on which Mr. Herre makes the following remarks : "The rulers of this powerful state were of Hindu blood who brought an advanced civilization to the Malayas. Brunei, Borneo became a great colony and distributing centre of Indo-Javanese culture among the remote islands to the north and the east. The Philippines became a dependency of Brunei. The Javanese obtained gold in the Agusan valley of Mindanao and mined in Masbate and Southern Mindoro. . . . . Their cultural influence was very strong in the Visayas. . . . . But with the downfall of the Madjapahit empire, the Philippines were conquered by a Chinese General. . . . . when there was a tremendous increase in Chinese influence. . . . . With the death of this General, the Overseas Chinese empire fell apart, and Muhammadan traders and missionaries (14th-15th centuries A.D.) became dominant in Java and Borneo. From Brunei and Johor they converted the people of the Sulu Islands and much of Mindanao. Later they established themselves in Luzon with headquarters at Manila which was ruled by a Muhammadan Raja from Brunei. With the Muhammadans came in Arabic influences."

Those who are interested in pursuing the anthropological problems in greater detail should follow the various publications of the scientific societies of the Philippines as well as of the United States of America. Twenty years after the American occupation a regular census of the Philippine Islands was compiled in 1918 and in the second volume of the census report Prof. Beyer contributed the first systematic survey of "The Non-Christian People

of the Philippines" (Manila, 1921). We know therefrom that the total number of persons designated as "Non-Christians" was 821,982 or about 8 per cent. of the total population. Of this number 402,790 were Pagans, 372,464 Muhammadans and 740 Buddhists. Prof. Beyer devotes special sections to (1) the Pygmies, remnants of three distinct aboriginal Melanesoid races—Negrito, Proto-Malaya and Australoid Ainu, (2) the Indonesians like the Ibanags, Gaddangs, Kalingas, and Apayaos, etc., and (3) the Malayas who are sub-divided in Pagan and Muhammadan groups. The native Pagans were converted to Islam subsequent to the 11th century A.D. Before that, for about 1,500 years, the Filipinos were influenced by the Chinese in their economic life but their social and religious life was throughout influenced by Hindu civilization, according to Prof. Beyer who points to the "Sanskrit element in Philippine languages." Hindu influence is also felt in the native mythology, folk-lore, early literature, codes of law, art and design and other symbols of the cultural, social and political life of the Philippines (*Vide* Krœber : *Peoples of the Philippines*, 1919, p. 10).

Since this valuable report of Prof. Beyer, there has been a surprising progress in the study of the palæo-ethnology and pre-historic archæology of Asia as evidenced by three important Congresses for Pre-historic Research in the Far East—one in French Indo-China (Hanoi), another in the Philippines (Manila) and the third in British Malaya (Singapore). Before 1932 few suspected that concrete archæological materials could be unearthed, proving conclusively that long before the use of metals the Philippines were inhabited by peoples using the New Stone Age and the Old Stone Age tools. Prof. Beyer, who studied these problems more than anybody else, gave us important landmarks of this pre-historic culture in some articles published in the *Philippine Magazine* (October, 1928; October, 1935). In the early Palæolithic Age when the primitive pygmies reached the islands, the Philippines were connected with Asia, at least with the larger Malaysian islands to the south. Then came from Borneo the Proto-Malay (Indonesian) people in the Mesolithic Age with stone arrows-heads and tools flaked from obsidian, flint, chert, etc., and a great number of these artifacts have been discovered in the lower foot-hills of Rizal and Bulakan provinces.

Between 6000 and 1000 B.C., the Neolithic people came in two distinct waves : the early Neolithic people (4.000-3.000 B.C.) used a type of stone-axe with a round or oval cross-section and they practised dry agriculture and their remains have been found in the river valleys of the hilly parts of Rizal and Bulakan. The late Neolithic people (2,000-1,000 B.C.) manufactured rectangular or trapezoidal stone-axes and practised a more exten-

sive and sedentary agriculture; turning of the soil and fertilization enabled them to use the land continuously and to build fairly big villages spreading over south-western Luzon. The best examples of their culture have been found in Batangas, and most probably this late Neolithic people came directly to Luzon from Indo-China, then of Bronze Age culture. Thus three bronze celts have been found in Batangas associated with typical stone implements, and the shape of those stone-tools " suggests a derivation from earlier metal forms," according to Prof. Beyer.

Some of these tools were used for the manufacture and decoration of " bark-cloth " which has such a long and interesting history among the Polynesian and other Pacific races, right up to New Zealand. Another interesting thing which connects New Zealand with Indo-China through the Philippines was the " jade-cult "; tools, amulets, beads and other ornaments of true jade or of a variety of green stone have been found, and these artifacts and some small images suggest that these New Stone Age people from Indo-China had well-developed religious beliefs of their own which could be traced right up to the land of the Maoris in New Zealand.

A little before the beginning of the Christian era, the Iron Age people entered the Philippines both from the South and the North. Those who came from Northern Indo-China into Luzon brought with them the rice-terrace culture, irrigation and many other arts. Those who came from the South brought the use of betel-nut, metal-working, weaving, glass-making and pottery. When they settled in the Novaliches district of Rizal Province these early Iron Age people not only mined and smelted their own iron ore but also worked other metals, gold and copper. Earrings, bracelets, amulets, etc., were manufactured from gold. Their pottery of many shapes and sizes were excellent; the pottery is wheel-turned, not hand-moulded, with red tint and decorations incised or scratched. In shapes and forms they resemble the later polished or slip-covered potteries, with moulded designs, appearing in the Transitional Period. The decoration of certain pieces shows a close kinship with that found in the Iron Age graves of Japan and Korea which are also of southern origin. The most interesting art, however, was the working of artificial glass : a green variety coloured with iron and a blue glass coloured by some copper derivatives. During this age iron was still scarce and used by the wealthier people and the common people used stone-tools. These people knew the art of irrigation and intensive cultivation. Their jewellery consisted of green and blue glass bracelets, with rounded or bevelled edges, and beads of such semi-precious stones as agate, carnelian, amethyst, rock-crystal, and sapphire. With regard to these

finds from the Iron Age site of the Novaliches river valley, dating approximately from the first millennium B.C., Prof. Beyer observed (" A Pre-historic Iron Age in the Philippines "—*Philippine Magazine*, October, 1928) :

" When we learnt all this material was not Chinese, we looked around for its nearest relatives elsewhere and found them in the Indian Peninsula. . . . . All of the Iron Age material is very much like that found in Southern India, Eastern Java, Northern Borneo and in parts of the Malay Peninsula. . . . . While the pre-historic glass beads and bracelets found in India are of some fifteen different colours, only two colours of beads are found here, green and blue. . . . . All this supports my view that the motherland of this culture was India. With the coming of the Chinese, the people began to buy their jewellery from them and forgot the art of making glass, just as our native weaving industry is dying out to-day because of the importation of cheap foreign textiles."

At the end of the Iron Age several new races of people came whose remains are being discovered in the old village sites and burial grounds in Rizal province and in the central Visayan Islands. Some of them practised cremation as in India, while others introduced coffin burial and other peculiar customs showing contact with Chinese culture. The earliest Chinese porcelain found here is of the 10th century A.D., and porcelain objects of rich variety continue down to the 16th century. During the Middle Ages the Filipinos were maintaining active cultural relations with the neighbouring countries of Java and Indonesia on the one hand and with Indo-China and China of the Sung and Ming dynasties on the other. Most of the early porcelains found in the Philippines belongs to the Sung dynasty showing the green glaze known as 'celadon.' While most of this valuable pottery came from China, some also came from the famous porcelain factory of Sawankalok in Siam. Thus this *Porcelain Age* of Philippine history touches the well-documented periods of contact with China and terminates with the invasion of Arabic Islam and the settlement of the Moros in the 16th Century.

Nearly twenty years ago the famous American anthropologist Prof. A. L. Kroeber drew our attention to some aspects of Indo-Philippino cultural relations in his book *The Peoples of the Philippines* (New York, 1919). As the book is not easily available today, I summarise his conclusions in his own words as far as possible. Back of Islam and Christianity lies a deeper movement, the most determinative of Philippine civilisation. This is an influence or rather a set of influences emanating from India : " A mass of religious ideas, practices and names, a considerable body of Sanskrit words, a system of writing, the art of metal working, a vast body of mechanical and industrial knowledge and unquestionably a much greater degree of civilization and refinement than had existed previously."

Of the Pagan Tribes, two big groups resemble one another, inspite of

distance : (*a*) the tribes of mountain Luzon and (*b*) the tribes of Mindanao, *unaffected either by* Islam or Christianity. They aggregate about a million in number, or twice as much as the number of American Indians in U. S. A. The Mindanao Pagans, probably owing to their proximity to Java and Borneo, absorbed more of Hindu civilization than the Pagans of Luzon; yet, strangely enough, the proportion of Sanskrit words is larger in the Tagalog of the North Island. So Hindu influence must have reached Luzon also, and the second largest Pagan group there is the Kalinga which meant 'enemy,' possibly of the older natives who had to face the Indian colonists from the Eastern Coasts of India. A similar process is noticeable later on when the Sailodbhavas of Kalinga conquered Java, where also we find a class of people called the Klings, precursors of the great Sailendra Empire. The Tagbanua in Palawan and the Magyan in Mindoro succeeded in preserving forms of an old native alphabet of Hindu origin. It is found incised on bamboo slips written vertically or horizontally. But this script has everywhere given way to the Arabic or Roman script. The last and declining phase of Hindu influence entering from the South could be traced as far as the Visayan Island; for Magellan found the chiefs of Cebu with the Hindu title of Raja The great Pagan gods were grouped into families in the Hindu manner. The chief deity of the Tagalog was Bathala, derived from Sanskrit *Bhattāra* = Javanese *Batāra Guru* (= Siva). The Sambol folk name their god *Akasi*, the Visayans have as god *Sivapa*. Corresponding to Hindu Pasupati, we find *Abog*, god of the hunters, and the Creator is styled *Pamulak Manobo*. Along with the gods came the cult of *Anito* or the *Soul*, the carved wooden figure of the Spirit, together with prayers and sacrifices, *mantras*, explanatory myths and fables, mostly of Hindu origin. The Tinggian people preserve down to this day fragments of romances, of battle, love and magic, of hidden birth, intrigues and adventures, " patterned on Hindu example." Prof. Beyer is of opinion that both the Rāmāyana and the Mahābhārata stories were partially adapted, but such exalted literary pieces could not be assimilated so fully by the Filipinos as by their more gifted brethren the Javanese. We find also the Hindu belief in a monster Rāhu causing the eclipse; the Magindanao Moro people named the five divisions of the day as *Maheswara*, *Kala*, *Sri*, *Berma*, and *Bisnu*, and Hindu astronomical names are still preserved among the Moslem population.

All the lowland Filipino dialects contain a stock of Sanskrit words. From the coast these words have spread to the interior districts specially in the South. In the north, Sanskrit was imported, in recent centuries, by the intrusive Ilokano people. Sanskrit words are about twice as numerous in

Tagalog as in the Visayan and the Mindanao dialects. This can be explained by the probable direct relations of the Tagalog zone with Indo-China, Siam and Malay-Peninsula. Sanskritic elements also penetrated Mindanao and Visayan Isles *via* Borneo, and thus a comparative study between the Northern and the Southern Sanskritic elements may reveal more important evidences.

The most remarkable monograph on this subject was published, in the last quarter of the 19th century, by the great Filipino doctor-patriot Don T. H. Pardo de Tavera. He was a voluntary exile from his mother country, then under the despotic Spanish regime, and, being in Paris, he possibly came in personal contact with great French Sanskritists like Barth, Senart, and others. Thus he might have been induced to compile a list of those words in Tagalog which appeared to him to have been derived from Sanskrit. His list was completed in 1884 when he was informed by Prof. F. Blumentritt that a similar list had already been compiled and published by the renowned Dutch Sanskritist H. Kern.* Dr. Tavera published his monograph in Spanish : *El Sanscrito en la Lingua Tagalog* (Paris, Impremerie de la Faculté de Medicine, 1887). In 1889, he published his second comparative study with regard to the Numerals in Tagalog : *Consideraciones sobre el Origin del Nombre de los Numeros en Tagalog.* Special importance, therefore, should be attached to the opinions expressed by Tavera, who pointed out that the words that were taken into Tagalog signified " intellectual acts, moral conceptions, emotions, superstitions, names of deities, of planets, of numerals, of botany, of war, of titles and dignities, of the instruments of industry, etc." Hence he argued that the Hindus must have been present in the Philippines, and that religion and literature, industry and agriculture were at one time in the hands of the Hindus.

Tavera, who thus came to be the pioneer in this line of study, was also probably responsible for rousing the interest in these subjects in his junior contemporary Dr. Jose Rizal (born 19th June, 1861 and executed 30th December, 1896), the great patriot-martyr adored by the Filipino people. Rizal also came to be interested in the study of anthropology, of myths and

* I. Sanskritsche woorden in het Tagala (1880).
II. Sanskritsche woorden in het Bisaya (1881).
III. Over de taal der Philippinsche Negrito's (1882).
IV. Eene bijdrage tot de kennis van't Oude Philippinsche letterschrift (1885).
Prof. Kern published all the above papers in the famous Dutch Journal *Bijdragen tot de Taal- Land- en Volkenkunde van Ned. Indie.* In his last paper, dated 1885, Prof. Kern refers to Tavera's Spanish article " Contribucion para el studio de los antiguos alfabetos Filipinos " (published from Lausanne), and also to the article of Mon. Jacquet on " Consideration sur les Alphabets des Philippines " already published in the *Nouveau Journal. Asiatique.*

legends and frequently uses the word *Indios* as a synonym for the indigenous people. It is of special interest to us to know that Rizal's uncle Don Jose Alberto was brought to a Calcutta missionary school, spending eleven years in Calcutta, thanks to the kindness of an English Naval Officer who visited the Philippines in 1820. Returning to the Phlippines, an ardent champion of English literature, Don Jose Alberto welcomed in 1871-72 Sir John Bowring (who was Governor of Hongkong concluding treaty with Siam in 1854), a famous translator of foreign poetry into English. Rizal as a boy had the good fortune of meeting Sir John as a guest of the family, and aspired to be a polyglot like him; and when he was barely nine or ten Rizal got a prize of two *pesos* (Rs. 3) by composing a verse-playlet in Tagalog. His last poem composed in the cell before his execution on the order of the cruel Spanish regime lives in the heart of every man and woman of the Philippines.

Privileged to travel in the same boat (S.S. *President Hoover*) with the enlightened President of the Philippine Commonwealth, Manuel Luis Quezon, who generously received me, I came to gather valuable information from him and from his learned associates like Dr. F. Benitez, and Prof. Conrado Benitez of the National University of the Philippines, who kindly furnished me with valuable information in course of our voyage back from Honolulu. The oldest University on an U. S. A. territory is the University of St. Thomas in the Philippines founded in 1611, and therefore by several years senior to the University of Harvard. Transformed into a modern institution, it has now about three thousand students. About 1620, the College of San Juan de Letran was established by the Jesuists who founded also the Ateneo de Manila. Temporarily suppressed at the time of the expulsion of the Jesuists, the Colleges revived, ever since 1880, when the Jesuists were permitted to return, and now each of the above two colleges have over one thousand students. The National University of the Philippines was established in 1901, having now about two thousand students. In 1908, the University of Manila was established, and although a private corporation, commands two thousand students. In 1918, was founded the Far Eastern University, originally a business college but now grown into a real University with all the Faculties and over three thousand students.

All these institutions carry on their work through English and therefore very conveniently placed for cultural exchange with India and the English-speaking world. The Filipinos like their Javanese cousins are naturally sensitive to music and art, and from the Filipino students, boys and girls at the University of Hawaii I gathered that a veritable revival of folk-dances and music is taking place. I found President Quezon deeply interested in

the revival of arts and crafts of the nation. The older generation of scholars in the Philippines used Spanish, as we find in the works of Dr. Tavera who showed how the original Filipino alphabet was borrowed from India and how their most important vernacular (near about Manila), the *Tagalog* (a sort of Filipino *lingua franca*) was strongly influenced by Sanskrit. Dr. Sixto Orosa, an authority on the Sulu Archepelago, showed how Indian or Indianised races entered the Philippines from Borneo, which links up Indonesia with the Philippines. Study of the folk culture of the Lanan Province has revealed survivals of Indian culture in riddles and folklores, games and festivals, arts and crafts, laws and morals. In the Middle Ages, Moslems from Malaya also entered the Philippines, and on that subject a book has been written by Dr. M. Saleeby, M.D., who knew Arabic and was an authority on the Muslims of the Mindanao. Dr. Beyer of the University of the Philippines is collecting materials for the last 15 years which are now treasured in the University Museum (*Vide* : D. N. Roy, " Indian Influence on Filipino Culture "—*Prabuddha Bharata*, May-June, 1934).

The National Museum of the Philippine Islands was established in 1901 for the study of ethnology, natural history and commerce under the department of public instruction. Assuming an independent status in 1929, it is growing into the Central Museum of history, ethnology and art of the Philippines containing also sculptures, paintings and other materials from Indonesia, the South Sea Islands and the Orient.

Thus from the recent history of the emancipation of the Philippines to the earliest Stone Age culture, we find so many points of comparison and contact between the Filipinos and the Indian people. Thanks to the kindness of President Bocobo ad Prof. H. Otley Beyer of the University of Philippines, I came to have access to materials on this subject which otherwise would have remained unnoticed. I draw the attention of the public, in this connection, to the latest and most authoritative *résumé* of the subject contributed by Prof. Beyer to the *Encyclopædia of the Philippines* which is in course of publication since 1936. Between 1926-30, the archæological survey of the Rizal province alone has yielded about 50,000 stone artifacts. Between 1931 and 1936 the exploration work was extended to the Batanga province in the South and to Bulakan in the North. Most of the finds are, as in India, of the late Neolithic or Chalcolithic culture; only the Philippine folk " had not progressed to the stone building, city-dwellng and writing stage " as we find in the Indus Valley. Before these late Neolithic agriculturists (4000-1000 B.C.), the Philippines were probably inhabited by nomadic Negrito hunters and food-gatherers or even by an earlier Australoid race that left flint tools and

flake obsidian (volcanic glass) of *circa* 8,000 B.C. During the first two millennia B.C. late Neolithic culture prevailed. This has been fairly demonstrated by the exploration of Governor F. G. Foth and Prof. Beyer, who came to the following important conclusoins :

During the first millennium B.C. a new race came to the Philippines who used cut-out or stepped tools showing that they knew the process of drilling and sawing. They were beaters of bark-cloth like the Hawaiians, and, like the Maoris, cherished jade-tools and ornaments. Then we find a " transitional form " of tools entering with bronze articles from the mainland, probably of the late Chou or early Han period, and their co-types have been found near Hongkong by D. J. Finn. Thus while the Mesolithic or early Neolithic cultures entered the islands from the South (Indonesia), the late Neolithic culture came from Indo-China or South China. The Filipino " stepped " adzes came to be the prototype of all Polynesian adzes, for we find them in Indonesia, whence they migrated eastwards to all the Pacific islands from New Zealand to Hawaii. The New Zealand forms resemble closely those of Batanga and South Philippines. The Hawaiian adzes, however, show some local modifications.

Chronological indications must necessarily be of a provisional character. But there is little doubt to-day in the assumption that the Indonesian ancestors of the modern Polynesians must have passed through the Philippines which " stand at the cross-roads of two great highway of Stone Age migrations, one running North and South from the Dutch East Indies to Japan, and the other, East and West, from Indo-China to Polynesia."

Archæological research in the Philippines is still in its infancy, and we hope that under the enlightened patronage of President Quezon more and more important treasures would be discovered and scientifically displayed in the projected National Museum of the Philippines. But, even with the modest data at our disposal, we may say that the Filipino civilisation is one of the most valuable links connectng the history of cultural migrations from the Indian Ocean on the one hand to the vast Pacific on the other.

In conclusion I give a list of the Sanskrit words in Tagalog compiled (1884) by Don T. H. Pardo de Tavera and published from Paris in 1887.

Antala= अन्तर
Asa= आशा
Astacona=अष्टकोण
Aya=अय
Bagyu=वायु
Bangsi=वंशी
Mandala= मण्डल
Manusia= मनुष्य
Mucsa= मोक्ष
Naga= नाग
Palibhasa= परिभाषा
Papa= पाप

Bani=वाणी
Banig=बनिंग
Calunia=करुणा
Catha=कथा (history)
Cosa=कोष
Daya=दाय
Ducha=दुःख
Gadya=गज
Gunita=गणित
Hari=सूर्य
Laba=लाभ
Lasa=रश
Linga=मूर्ति
Mana=मन
Salita=चरित्र
Samala=समर
Sandana=चन्दन
Sampaka=चम्पक
Sangsala=संसार
Sila=शील
Sinta=चिन्ता
Sirhi=सिद्धि
Susi=सूची
Talaga=तर्क
Vastu=वास्तु
Vica=विवेक
Yambu=जम्बु

* Many valuable facts and theories have been presented by Dr. D. N. Roy, in his book "The Philippines and India" (1930). He spent several years lecturing at the University of the Philippines and he observed that while most of the ancient manuscripts or books in Indian script, were destroyed by the Spanish priests, a few had been recovered in the island of Negroes and other parts of the Archipelago. According to Prof. Beyer, Mindoro appears to have been the very centre of Hindu influences. He also traced the survival of many Vedic beliefs among the present folks of Mindanao and the Bisayas. This is of special interest to us because we know that one of the earliest epigraphs of Borneo, the Yupa inscription of King Mulavarman, refer to Vedic rituals there in 4th century A.D. Dr. Najeeb M. Saleeby in his "Origin of the Malayan Filipinos" (1912) considers that there were immigrants from India to the Philippines long before the Hindu-Buddhistic penetration of Sumatra and Java. Mr. C. E. Russel in his "Outlook of the Philippines" also refers to several scrolls in Indian scripts and to images of Hindu gods in bronze, copper or gold, all destroyed or taken away from the temples of many settled towns. We hope that the United States archives and museum authorities would soon arrange to publish descriptive catalogues of such Indic materials from the Philippines as have escaped the ravages of time. The migration of the Pallava script and Dravidian influence followed by the introduction of Arabic script and Muslim influence should attract groups of scholars from our Indian universities to visit the beautiful Philippine Archipelago and to initiate a most promising line of comparative study of Indo-Filipino culture, in collaboration with our colleagues of the University of the Philippines whom I found very sympathetic to India and her hoary civilisation.

CHAPTER VI

INDIA AND THE ARCHÆOLOGY OF MALAYSIA AND INDONESIA

IT is only recently that we are realizing the importance of the Malayan world for researches in anthropology and archæology. The ethnic history of the Malay peoples is still far from being clear. We find them mostly as a maritime race whom we may call the Oceanic Malays. But they have got their cousins on the mainland as well spreading over the Malay Peninsula and Indo-China, who may be called Continental Malays. The Proto-Malayas are sometimes called Oceanic Mongols spreading over the vast " Oceanic domain of Further Asia from Formosa to the Nicobars and Madagascar." And as Dr. Hutton observes in his paper on " Races of Further Asia,"[1] the Proto-Malayas are found " forming hybrid groups by fusion with Negritos, Papuans, pre-Dravidians or Indonesians." The present day Malays with dark-brown skin may thus very probably be the result of the fusion of the Yellow races from the North with the Black races of Southern Asia. Thanks to the researches of French scholars, we now know that the far off island of Madagascar is culturally and linguistically connected with the Malayan world, and the devoted workers of the *École Française d'Extrème Orient* in Hanoi (Indo-China) are supplying valuable materials for the study of the archæology of Malaysia. The history of the Proto-Malays and the Malays will, therefore, when adequately treated, enable us to follow the striking lines of expansion of the primitive peoples from Africa to Melanesia across the Indian Ocean to the Pacific.

The earliest, so far traced, of the dark races to spread over Malaysia and South East Asia were the Negritos, precursors of the Negroids or Oceanic Negroes as opposed to the Continental Negroes now in Africa. The Negrito as a submerged Pre-Dravidian element in our Indian population, has been definitely identified by Dr. B. S. Guha, in the extreme South-Western strip of the Peninsula consisting of the hills and ranges along both sides of the Ghats. There we find such tribes as the Kadars, Irulas, Pulayans, etc., who are basically Negritoid in character but modified by other racial elements specially the Proto-Australoid, spreading from the Gulf of Cambay to the coasts of Orissa now speaking mostly " Austric " speech common to the Kols,—the Mundari, Santal, Juang and Savara tribes. A

1. *Man in India,* Vol. XII, No. 1, 1932.

few others like the Bhils, the Gonds, and the Oraons now speak corrupt forms of Dravidian or Aryan speech abandoning their tribal languages. These Proto-Australoids or Veddoids (as they are sometimes called from physical affinities with the Veddas of Ceylon) may be the earliest indigenous subtratum interspersed with a mild filtration of the Negritos whom we find in South India in the Andaman Islands, in Malay Peninsula (Semang races), in East Sumatra and in the Philippines (Aeta people). Agriculture and domestication of animals were unknown to the Negritos who were, mainly speaking, food gatherers and hunters with bow and arrow as their typical weapon (unknown to the Veddoid ancesters of the Australian aborigines).

After the Negritos we find the infiltration of the Oceanic Negroes represented by its Papuasian branch leaving their traces among the Naga and other tribes of Assam and those of Papua and Fiji in Melanesia. The earlier and later strands of this Melanesoid culture are just being distinguished as we shall presently discuss. Their cultural contributions may not be much but they supply valuable links in our study of the stone-age cultures of Asia.

Next to the Melanesian races come the Indonesians who were composed of a Caucasic stock modified by Mongolian infiltration. Racially the Indonesians were " submerged " according to Dr. Hutton, but the area once covered by the Mon-Khmer languages of the Indonesian stock embraces Cambodia and Yunnan in French Indo-China, Wa and Palaung lands in Burma, Khasi Hills in Assam and the Munda zones of Chota Nagpur. In those areas have been discovered a special type (which we may call Indonesian) of polished stone adze " the tanged and shouldered celt." Other characteristics noted by Dr. Hutton are tatooing, canoe-drum, megalithic culture, head-hunting " to secure souls to add to the general village stock of soul matter which is required for the successful propagation of animal and cereal life," phallic cult, terrace cultivation, buffalo and plough cattle, among others. These are found in Assam, Burma, Malay Archipelago, the Philippines and in Formosa, Papua and Oceania. Along with these there appeared totemism, taboo, exogamy, matrilineal society, bachelors' hall, priest-chiefs and prayer-houses developing into temples in Indonesia and Polynesia. We have noticed how often the students of Micronesian, Melanesian and Polynesian cultures turned to Indonesia for the explanation of many customs and institutions in the remote parts of Oceania. Now Indonesian and Mon-Khmer cultures are considered by an eminent authority like Dr. Hutton* to

* *Man in India*, Vol. XII, No. 1, 1932.

have their origin in Southern India (pre-Dravidian and Dravidian). Consequently, Pre-Aryan India should be a most profitable field for those who aspire to contribute new chapters to the pre-historic and anthropological studies of Asia.

Next to Dr. J. H. Hutton's admirable survey of the " Races of Further Asia " prepared for the 14th Edition of the *Encyclopædia Britannica* (1929), we should notice Dr. P. V. van Stein Callenfels' monograph on " The Melanesoid Civilizations of Eastern Asia."[2] Traces of Melanesoid civilizations were discovered also in French Indo-China by Mm. Mansuy and Palle and Dr. M. Colani and came to be critically examined at the First Congress of the Pre-historians of the Far East (Hanoi, 1932). The second session of that Congress was in Manila (1936) when heaps of new materials came forth for examination and a third session of the Congress was organised by the Raffles Museum in Singapore (1938).[3]

In 1935, Dr. Callenfels was entrusted by the Carnegie Corporation of New York, with the task of making a systematic survey of the palæolithic and neolithic sites and human remains of Melanesoid and Indonesian affinities. He completed his report (dated Kyoto, December, 1935) of the first year's work (1934-1935) in course of which he regretted that " both Siam and Burma are still blank areas on the pre-historic maps."[4]

The conclusions of Dr. Callenfels as recorded in this, practically his last scientific communication on the subject, deserve close attention : Far from being confined to present Melanesia, the geographical extension of the composite Melanesoid culture takes us to the Tumba culture of West Africa where according to Dr. Menghin, we find " artifacts bearing a strong resemblance to the palæolithic types of Western Europe like Chellean, Levalloisian or Mousterian." These types have already been found in South India, Java and South China. So it seems probable that from Africa, the home of the Dark races, the oval or ellipsoid chipped implements reached Western Europe on the one hand and *via* India to Java and the Far East on the other. We quote in this connection the following significant remarks of Dr. Callenfels who seemed to support the hypothesis of Dr. Hutton :

2. *Bulletin of the Raffles Musum,* Singapore, Series B. No. 1, May, 1936.

3. This information I gathered from the authorities of the Museum and from Prof. Otely Beyer of the University of the Philippines on my way to and from Polynesia and Australia (1937-38).

4. He collaborated with the French and the British workers and was preparing for a survey of Burma when suddenly he died in Rangoon, to the great loss of pre-historic studies in the Far East.

" It seems not improbable that influences from India played a part in the development of the Melanesoid civilisations, and the theory that the cultures found in Malaysia had their origin solely or mainly from Tonkin (Hoabinhian) can no longer be maintained." In discussing a rare stone arrow head found in north-eastern Kedah, Dr. Callenfels opined that the arrow head, like the neolithic and bronze civilizations of the East coast of Sumatra, opposite Kedah, probably showed " Indian or Burmese influence." Another Dutch archæologist, Dr. G. H. R. von Königswald who published his results on the " Early Palæolithic Stone Implements from Java "[5] definitely correlated the Pleistocene hand-axe cultures of Java and India[6] while reviewing the *Stratigraphy of Java and its Relations to Early Man.* To find implements comparable with the Javanese hand-axes we must go back, he says, " to the beginning of human industry, to the early palæolithic Chellean culture known from Europe, Africa and India, and indeed to the most primitive phase of this culture."

Dr. Callenfels, however, warned us against accepting mere typology as a reliable indication of age which can only be fixed by more convincing geological or palæontological evidence. But he agreed that probably the oldest wave of Melanesoid civilization reached Java. One of the earliest human fossils was found by Dubois in Trinil and another near Wadjak where probably a proto-Australoid type was discovered and within fifty miles from that site Dr. Koenigswald found stone-tools of the Chellean type. A very remarkable find was that in the rock-shelter called Guwa Lawa near Sampung (East Java). Here, between a layer with stone arrow heads below and one with polished stone-axes above, a culture was discovered using only bone and horn artifacts, nowhere else to be found associated with a Melanesoid culture. The protoneoliths found near Malang, East Java resemble those from Celebes. Palæolithic tools have also been found in the Melanesoid remains near Galumpang in West Central Celebes and probably a Melanesoid bone culture reached Java *via* Celebes. Melanesoid palæolithic artifacts have also been found in Sarawak and in Dutch West Borneo.

Thousands of such stone-axes have been found in the East coast of Sumatra. This " Sumatra type " of tools consists of rounded pebble worked on one side only. Two other types could be distinguished : a broad flat axe and a thicker elongated pick. Polished neolithic axes and bronze axes have also been found in East as well as North Sumatra and in Nias, pointing

5. *Bulletin of the Raffles Museum,* May, 1936.
6. *Early Man,* 1937.

to a later stage of culture derived from different sources. Grinding stones and slabs associated with hæmatite used as pigment have been found in Sumatra and in Malay Peninsula but are totally absent in Indo-China.

A very primitive type of culture has been found by the Swiss Anthropologist, Dr. F. Sarasin, in the caves of Northern, Central, and Southern Siam. But systematic excavations have not yet been undertaken.

In Indo-China valuable relics of Stone Age culture have been found in Bac-son and Hoa-Binh. Suffice it to say that the palæolithic tools from those sites are associated with Melanesoid human remains and the proto-neoliths with the Indonesian strata which apparently succeeded.

In the Kwang-si Province of South China an expedition sent by the Chinese Geological Survey discovered a late palæolithic culture with no polished celt or pottery. This Kwang-si culture appears to resemble the Stone Age cultures of Western Europe and it is described by Dr. W. C. Pei in his paper " On a Mesolithic Industry of the Caves of Kwangsi."[7] This may be the forerunner of the Bacsonian (early Neolithic) culture of Indo-China.

Palæolithic and proto-neolithic implements have been found, as we have described above, near the Laguna del Bay in Luzon and other parts of the Philippines which wait for systematic exploration.

Even far off Japan which is generally considered to be in the neolithic zone some apparently late palæolithic tools were reported to have been discovered by Prince Oyama among the kitchen-middens of Liu Kiu Islands. In 1932, Dr. Callenfels could detect similar implements from Kiushiu, Hondo and Sendai islands. These tools have not yet received sufficient attention from the authorities of different Japanese Museums because of their pre-occupation with ceramic materials.

Malay Peninsula is the natural land bridge between India and Indonesia. Yet, owing to the cultural backwardness of the people inhabiting that country, few explorations have been undertaken. As early as 1880, Mr. L. Wray, former Director of F. M. S. Museums discovered shell and bone deposits at Gunong Pondok, Perak. In 1886, he excavated some rock shelters at Gunong Cheroh near Ipoh and reported finding human remains (neo-lithic ?), red pigments and grinding stones but no palæolithic tools or flakes.

Between 1917-1921, Mr. I. H. N. Evans conducted excavations in several places; at Gua Kajang near Lenggong, he found tools of palæolithic

7. *Bulletin : Geol. Soc. China,* XIV, 1935.

type but no proto-neoliths, as he reported. He found proto-neoliths near Gua To Long in Pahang and thanks to the expert colloboration of Dr. Callenfels he could trace (in 1926-27) a definite Melanesoid culture in Gua Kerban rock-shelter in Gunong Pondok (North Perak). Among the finds are mentioned palæolithic tools including Sumatra-type, proto-neoliths approaching neoliths, crude pottery (very rare in lower levels), red pigment, grinding stones, etc., with human remains.

Melanesoid palæolithic tools, worked on both sides (and not associated with any proto-neoliths) were found by Mr. G. W. Thompson in 1921-23 near the Sungai Lembing tin mine in Pahang. In the alluvium of a small stream he found also " layers of flakes and chips " suggesting probably that it was an " ancient workshop." Some of the artifacts are of the unwieldy Indo-Chinese (Hoabinhian I) type and represent probably the oldest stage of the Melanesoid culture in the Malay Peninsula.

Under the auspices of the Carnegie Corporation (New York) several important excavations were made in 1934-35 and preliminary reports thereof were published by Dr. Callenfels.[8] In the Province of Wellesley, three kitchen-middens were excavated in 1934 at Gua Kepak where he found traces of scondary burial, hæmatite and pure neolithic " axes with an encircling groove " round the base for the attachment of a rattan handle. The forerunners of this type may be the " knob-handled axe " from Gulampang, Central Celebes or the type of tools found in Kalgan in Mongolia, Manchuria and Japan as communicated by Dr. Callenfels in the *Proceedings of the Second Congress of Pre-historians of the Far East,* Manila (1936).

In the lime stone hills of Baling in Kedah, a cave was excavated by H. D. Collings and inspite of difficulties in cultural stratification, was attributed by Dr. Callenfels to " the same wave of civilization as that of Gua Kerban showing proto-neoliths developing into true neolithic tools with a straight edge and also of small chipped picks." Another site was excavated by Mr. M. W. F. Tweedie at Bukit Chintamani in Pahang. Here the oldest layers showed a culture without pottery and with palæolithic " Sumatra-type " tools which was succeeded by a later stratum with pottery and proto-neoliths. The older type of pottery shows that netting was used for impressing the ornaments on vessels before baking. The later type of pottery probably belonged to Iron Age, and its inner surface was varnished probably with gum or lac which were used for coating (both externally and internally)

8. *Bulletin of the Raffles Museum,* May, 1936.

in the pottery found by Mr. Evans in the Iron Age slab graves at Changkat Manteri and Sungkai.

Summing up his observations, Dr. Callenfels remarked that the oldest phase of Melanesoid culture in Malay Peninsula appeared to be that of Sungai Lembing with palæolithic culture. The proto-neolithic stage is reached in Gua Kajang, Gua Kerban and the Baling caves. Partially belonging to these stages and partially different from and later than those, stand the layers of the Chintamani caves where, both in the higher and the lower levels, secondary burials occurred. Ordinary burial is found in Gua Kerban rock-shelter. Gua Kepah with its peculiar neolithic axes is quite distinct and seems to represent the youngest stage of Melanesoid civilization so far known, in this part of the world. The later Melanesoids evolved tools which appear to show that they employed them in some kind of primitive agriculture. And here as elsewhere " when human remains are found associated with proto-neoliths and pottery, they include individuals with affinities other than Melanesoid." Dr. Callenfels admits the presence of the second race, the Indonesians living with the Melanesoids, practising burials with no trace of cannibalism.

In tracing the history of the relatively simple and unmixed Melanesoid races and culture we have often been puzzled by complicated problems which only further researches may solve. The difficulties are multiplied more and more as we proceed to tackle with the history of mixed races like the so-called Pre-Dravidians and Indonesians who seldom appear as pure races and only offer some " archaic survivals," the date or cultural sequence thereof, remaining often vague and perplexing. The theories and interpretations of the ethnologists and anthropologists often conflict, and no less conflicting are the opinions and observations of archæologists who worked in this much neglected field of Malaysian pre-history. Dr. Callenfels warned us against accepting mere typology as a reliable indication of age for he showed how apparently old stone culture and tools from Galumpung (Celebes), Gua Kerban (Malay) and Kwangsi (South China) which abound in so-called " Chellean types " are probably " younger than Mesolithic." So proto-neoliths are often confused with neoliths and the neolithic culture has no clear chronological boundaries, sometimes, as in the history of Japan and some other countries, the neolithic age and culture reached as late an epoch as the beginning of the Christian Era. Even the fossilisation of bones, wood etc. is found to take different spans of years in different climes and countries and thus mere fossilisation is a most unsound criterion for age in case of a country like Java, (as observed by Dr. Callenfels), where, in some sites,

bones and other objects get fossilised in a very short time. With all these reservations, we may nevertheless pursue the study of palæoethnology and prehistoric archæology of Malaysia.

Next to the Melanesoid Negritos, we notice the somewhat obscure group of pre-Dravidians spreading from India into the Malayan world. Dr. Hutton has identified them with the Sakai of the Malay Peninsula, the Toalas of the Celebes and their cousins in East Sumatra, the Ulu Ayar tribes of Dutch Borneo with the blow gun as their distinctive weapon. This pre-Dravidian strain in some of the hill tribes of Assam and Burma is admitted by Dr. Hutton. He considers the Indonesians as introducing the earliest and the most abiding cultural elements in Further Asia, from Assam to Fiji, from the Munda zone to the Polynesian world. The Indonesians were probably composed of a Caucasic stock which, according to Hutton, occupied South-East Asia at a very early date and was modified by Mongolian infiltration. These Indonesians were submerged by the flood of South-Mongoloid races, called by Dr. Hutton, as the Pareœan invasion represented by the North to South drive of the Shan and other Thai tribes, the Burmese, the Annamites, down to the Kuki-Cachins of our own days. As a result of such racial fusions there emerged the Oceanic Mongols, the Proto-Malays or the Indonesians. Leaving the mainland to the indigenous pre-Mongol folks and to the invading Southern Mongols, the Indonesians with a rare audacity and adaptability spread over Malaysia and Micronesia and again through Melanesia reached the farthest confines of the Polynesian world. This forgotten history has been partially reconstructed by W. F. Perry in his *Megalithic Culture of Indonesia* and by Loeb and Heine-Geldern in their studies on *Sumatra*.[9] Recently Mr. Sheppard in his paper on the "Megaliths in Malacca territory"[10] concluded that "a wave of Megalithic culture may have passed through Malacca, *en route* for South Sumatra, Java and the South Pacific." He further pointed out that the megaliths of Talang Padang should be studied along with such other monuments found in Assam and Burma, in the Celebes, Nias and the little Sunda islands.

One of the best collections of Malaysian antiquities is to be found in the Raffles Museum of Singapore. Founded in 1844, it got a new building in 1887 with special galleries and departments on Zoology, Ethnography etc., of Malaysia and Indonesia. It is an institution for regional research containing a representative collection of finds from various expeditions in

9. Robert Heine-Geldern, Pre-historic Research in Indonesia in *Bibliography of Indian Archæology, Leyden*, 1934.

10. *Bulletin of the Raffles Museum*, May, 1936.

Malay Peninsula. The Museum has recently departed from its regional function by assembling in its new Hall of Asiatic Pre-history, a synoptical series of stone-implements and other objects from many regions in the east and southeast of Asia. Its *Bulletin* was mainly biological in character but it has, from 1936, opened its pages to non-biological research in its series, B, which gave the first survey of pre-historic research in the Peninsula.

The Perak Museum has been collecting tools and specimens from the Perak state, Kelantan, Pahang, Kedah and Negri Sembilan.

The Selangor Museum contains artifacts from Selangor, Negri Sembilan and Pahang. Neolithic stone stools are very common in Kuala Tembeling, Kuala Kangsar and other places. Mr. Evans has classified them into four common types :—

(1) Stone adze-head with chisel-like edge.
(2) Stone adze-head with slightly hollow ground at the point on the ' under ' surface.
(3) Large stone adze-head.
(4) Short adze-head ground on both sides towards the point.

Among the rarer types Mr. Evans refers to " quoit shaped " objects in black and greenish blue stone and also to a kind of " shouldered " tool found in Taiping. The latter is well-known from north-east India (Munda-zone), Burma, Siam and Indo-China. These neolithic implements followed the invasion of Malaya by a Cro-Magnon race (Indonesians), who subjugated the palæolithic cave dwellers using Chelleo-Mousterian tools.

While there are plenty of axes and adze-heads, no stone knives, spears or arrow heads so far have been discovered. These, according to Evans, probably came to be made of hard wood or bamboo as we find in New Guinea; but in the Admiralty Islands, where obsedian (volcanic glass) is available, we find chipped points, so well known to the Maoris.

Some late neolithic objects are found mixed up with bronze or iron age finds, *e.g.*, in the Iron Age graves of granite slab, discovered at Changkat Mantri (near Bernam river, Perak) where have been found rough pottery, with carnelian beads, bronze vessel, iron tools, and stone bark-cloth beaters also found in Passo, middle Celebes and in so many places of Polynesia which developed the bark-cloth industry transmitted by their Indonesian forbears. Such dolmens and cists have been found also in East Java where the culture objects range from late neolithic to the iron age strata. Mr. Evans mentions granite megaliths at Linggi, Negri Sembilan and compares them with the megaliths found in Indonesia and those in north-eastern India

" which are so intimately connected with Indonesia and Malay Peninsula." With this remark he refers to the standard works like *The Khasis* by P. R. T. Gordon and to *The History of Upper Assam,* by L. W. Shakespeare as well as to the Hikirs, Nagas, and Ho-Munda tribes who erect memorial stones for departed spirits as we find among many races of Malaysia and Oceania. This megalithic culture according to Dr. Hutton, takes the form of menhirs and dolmens, intimately connected with the cult of the dead and also with a phallic cult : " The general theory underlying it seems to be that the soul of the dead takes up its abode in the erect or the recumbent stone,[11] according as the sex is male or female and that the fertilization of the crops and propagation of all life is dependent on the action of the soul which is assisted by a process of sympathetic magic dependent on the symbolic form of these megalithic erections." The survival of this cult in Chota Nagpur, in Assam, in parts of Indo-China and in Madagascar suggests that it originated at a very early date and " perhaps preceded the expansion of the Proto-Malay race." Thus although the origin of the Mon-Khmer culture is still obscure, it is possible, says Dr. Hutton that India was " the source of the Indonesian and Mon-Khmer cultures." He compares very significantly the *aren* or soul-matter of the Ao-Nagas with the Polynesian *mana* or dynamic soul-principle. He refers also to the canoe-drum and canoe-cult spreading from the Naga and Khasi Hills, Burma, Malay Peninsula to Borneo, Melanesia, Fiji and even to South America.

In their cult of the Dead, we find platform exposure (as among Australian aborigines), burial and burning (without any reference to Hindu influence), the ideas of " the Village of the Dead," and of the " overseas " colony of the Dead. Dr. Hutton refers also to urn-burial in Naga Hills, saying that the " boat-shaped coffins are used, some times where boats are unknown," and that the construction of the war canoe is " attended in the Naga Hills by *tabus* identical with those attending the construction of canoes in Melanesia." (*Man in India,* Vol. XII, No. 1, 1932).

Another *tabu* among the Malays refers to the eating of the buffalo which has been definitely associated with Mon-Khmer culture and irrigated terrace cultivation in Assam, Borneo and the Philippines. Head-hunting and tatoo patterns referring to rank or to head-hunting exploits are found among the Assam-Burma Hill tribes, the Tai races, the Kayans of Borneo and other tribes of Oceania.[12]

11. Cf. The guardian stones " used by the Nias Islanders, the Dusuns of British North Borneo and the Tingnians of the Philippines."

12. Skeat and Blagden, *Pagan Races of Malaya Peninsula,* 1906.

Thus we find again and again traces of Indonesian races and cultures following in the wake of Melanesoid races, as we notice in so many ethnic and cultural survivals of Malaysia, Polynesia and Oceania. Definite chronology is out of the question but as we have noticed in our chapter on the race migrations into the Philippines, the Negritos reached there in the Old Stone Age, while the Indonesians or Proto-Malays appeared with the New Stone Age cultures about 5000 B.C. Their history can thus be studied rarely with reference to surviving monuments but their tools and implements are being classified, helping us further in the study of palæoethnology of Oceania. It is significant that the Negritos still survive in Malay Peninsula, in Siam and the Philippines and Mr. Evans refers to a story reported by a Negrito woman to the effect that their people " came originally from Lanka when it was burnt." Hence are their curly hair and monkey affinities ! These Negritos were pushed up into the hills by the invading Sakai people who were pre-Dravidians. With the Indonesian invasion, possibly both the Negrito and the Sakai began to borrow from the Mon-Khmer or Austric languages which influenced the Negrito and Sakai dialects. The Proto-Malay Indonesians or Austronesians fused with other races to form the present Malays who were pushed into the sea by the aggressive South Mongolian races, notably the Thai, and thus the overseas colonies and empires of the Malays gradually emerged in history.

Mr. Evans refers, in this connection, to the three pre-historic types of men so far traced in Indo-China : Negrito, Cro-Magnon and Melanesian. He further institutes a close comparison between the pre-historic finds of Indo-China and Malaya. We summarize below his conclusions so far as they relate to Malay Peninsula :

(1) A Melanesoid palæolithic culture with chipped and grounded tools and flakes from the caves at Lenggong, Nyik (Pahang) and Gunong Pondok. This rude lithic culture, without any transitional type as we find in Indo-China, was followed by—

(2) A Neolithic culture of an invading Cro-Magnon people at Gunong Sennyum (Pahang) and in two places in Perak.

(3) Stones for grinding spices and colours : red paint to anoint the body.

(4) Cord-mark pottery followed by coarse glazed wares with basket design.

(5) Pounders with grip-depressions, associated with the lower neolithic culture of Malay.

(6) Ashes overlying human remains.

(7) Associated fauna not of the extinct types but of the surviving species. Fish bones are not common but plenty of Melania shells and turtles used for food are found together with marrowbones of monkeys, deer, pig, rhinoceros, etc.

Evans and Callenfels traced a new " Sumatra " type of palæoliths made of pebble with only one face chipped. These are found in Sumatra, in Upper Perak and in the caves of Indo-China.

That the crude palæolithic Chelleo-Mousterian culture was followed by a neolithic culture with polished tools is fairly clear. But Malay Peninsula is as yet imperfectly explored and its pre-historic study is still in its infancy. Hence we are often confused by contradictory reports which may be cleared up with further excavations on scientific lines. At the end of the Neolithic Age we find plenty of metal objects as we may expect in this land ever famous for its mineral resources. But the systematic survey of the Metal Age of Malay has not yet been attempted. So we do not know yet what progress in metallurgy was made by the aborigines of the Malayan world which came to be dominated by the Proto-Malay (Indonesian) and the Malay races.

Thus it is clear now that the Malaya served, in the pre-historic ages, as the transmitter of races and culture from India and the Pacific world. So in the historic epoch the same process continued. Yet strangely enough, the Malaya remained, till quite recently, almost a totally neglected field. Thanks, however, to the initiative of Dr. H. G. Quaritch Wales, the Greater India Research Committee, of which he is the first Field Director, was formed. He undertook the systematic exploration of Malaya a few years ago, obtaining promising results. Dr. Wales published a summary of those results in a recent paper on the " Art and Archæology of Ancient Malaya " in course of which he observed : " The object of the work was primarily to gain by practical means, a fuller understanding of the processes of ancient Indian cultural expansion which led ultimately to the flowering of the Indo-Javanese and Khmer civilizations in the further East."

Malaya was on the main *sea route,* of all times, between China and the West, as Dr. Wales rightly observed. But we must remember at the same time that Malaya was a most important *land route* for the migration of Indian culture into Siam and Indo-China. The Indian colonists often avoided the risky sea route round the coast of the entire Peninsula and preferred to pass through Kedah (=Sanskrit *Katāha*) into the South Siam

and thence into Upper Siam, Laos, Cambodge and Champā, where we often find traces of simultaneous penetration of Indian culture by the land as well as by the sea routes.

During his recent excavations (1937-38) in the Malay States of Kedah, Perak and Johore Dr. Quaritch Wales made valuable additions to our knowledge of Malayan antiquities : In Kedah alone, he excavated some thirty ancient sites, dating from 4th to 13th century A.D. In an isolated hill on the Sala river (twenty miles north of Kedah peak) he discovered a stūpa with a stone inscription of the usual Buddhist formula *Ye Dharmā*, etc., in South Indian script of 4th century A.D. In another laterite stūpa-base on the left bank of river Bujang (? Sanskrit *Bhujanga*) he discovered a sun-dried clay tablet inscribed with three stanzas of a Mahāyāna text ascribed to the 6th century A.D. Thus it " antedates by more than a 100 years the dated Mahāyāna inscriptions from Sumatra previously believed to be the earliest evidence of the ' Great Vehicle ' in this region."

The palæographical examination of the numerous clay tablets in the Raffles Museum and other epigraphic documents in Malay will surely reveal that to reach the remote regions of Indo-China and Indonesia, Indian cults (both Brahmanical and Buddhistic) must have passed through Malay where more copious traces thereof, would be found with systematic explorations.

Kedah was at first a dependency of the ancient Malayan state known to the Chinese as *Lang-ya-hsin* which was renamed as Lankasuka with the assertion of independence of the Hindu colonies strengthened by the coming of the Pallavas towards the end of the 6th century A.D. This Hindu city of Lankasuka on the river Bujang after incorporating the older capital of Port Ligor, flourished in the 7th and 8th centuries. Remains of ruined Siva temples of this period have been found and Dr. Quaritch Wales is of opinion that " there was sufficient evidence to establish beyond doubt the Pallava affinities of the art of the colonies." He further observed that the shape and form of the roof of a miniature bronze shrine reminded him of the Sahadeva Ratha of Mamallapuram. It shows the Caitya window design, the Kalasa or flower-pot on the top and four Saivite ascetics sitting cross-legged at the four corners of the bronze shrine found in the bed of the Bujang river.

Another beautiful Siva temple has been discovered on a low spur of the Kedah peak and constructed with carefully shaped granite blocks, qurried nearby. In its foundations have been discovered many precious objects resembling silver capsules each containing a ruby and a sapphire. Among the foundation deposits have also been found stone caskets with gems and gold objects. Gold and silver discs, jars with cult objects have also been

found. While excavating the foundation of a pillared hall Dr. Wales found within an earthen jar an inscription, on silver, in the South Indian script of 9th century A.D. and also some Arab coins, one definitely dated A.D. 848. Another such pillared hall is ascribed to 9th-10th century A.D., when the Sailendra kings dominated over the state of Lankasuka and constructed many Buddhist temples (including the great Borobudor in Java) of Mahāyāna denomination specially favoured by the Sailendras.

Inside the brick-lined chamber of laterite flint was discovered a rare type of a bronze casket south Indian in design. It contains a silver bull, a bronze horse, a tin lion, and the shape of the miniature weapons deposited remind us of those represented on the bas-reliefs of Borobudor which show a special type of dagger depicted on the Mahisāsūra Mandapa of Mamallapuram.

After the Pallavas, the famous Cola kings, specially under Rājendra Cola the Great, extended not only the cultural but political domination over Malay as is well-known to students of Cola history and epigraphy. So it is natural that traces of a revival of Hinduism in Kedah during the 11th-13th centuries are found on the lower reaches of the Bujang river. Buddhism also probably lingered but several brick temples with Hindu images, terracotta Ganesa and other cult objects seem to explain why the Malays were called *Hindus* when they were conquered by the Islamic invaders in the 15th century.

In an earlier communication on the subject published in the *Indian Art and Letters*[13] Dr. Quaritch Wales threw a new light on the route of migration of Indian culture into Indonesia through Malay Peninsula.[14] He supports substantially the theory of Dr. R. C. Majumdar on the origin of the Sailendras of Indonesia,[15] concluding that a state named Srīvijaya existed in South-east Sumatra in the 7th century A.D. dominating the Malay Peninsula as far as Ligor or Srī Dharmarāja. In 775 A.D., the Srīvijaya kingdom was displaced and absorbed by the great Indianised empire of the Sailendras who probably belonged to the Ganga dynasty of Kalinga and Mysore and were Mahāyānists by religion. Reaching Ligor about the middle of the 8th century they spread their power over Further India, Cambodia, Champā and Ceylon bringing with them the Nāgarī script and the new name of Kalinga for Malaya.

They ruled over Malay Peninsula and Indonesia for nearly six centuries

13. Vol. IX, No. 1, 1935.
14. *A Newly Explored Route of Ancient Indian Cultural Expansion.*
15. *Journal of the Greater India Society*, Vol. I, Part II, 1939.

(8th to 14th). The Cola inscriptions refer to the Sailendra dynasty as reigning over Kadāra (Kedah) and Srīvijaya came to be named as Javaka (=Zabaj of the Arabs). It is quite likely that the Sailendras adopted the name Srīvijaya after conquering the earlier Sumatran state of the same name near Palembhang which was considered by Cœdès and Ferrand to be the capital of the Srīvijaya empire. Prof. Majumdar, who shifted the political centre of gravity to north Malay, suggested that the capital might have been at Ligor or Nakon Sri Thammarat; but Dr. Quaritch Wales concluded on the strength of archæological evidence that Jaya (abbreviation of Srīvijaya) or Caiya was the earlier capital which was displaced later on by Nagara Srī Dharmarāja. The early Indian colonists, after crossing the Bay of Bengal, appeared to have settled near Kedah. Their onward march was partially impeded by the Malay pirates swarming the straits of Malacca, forcing them to discover some safer land-route to the eastern coast of the Peninsula. According to the theory of Dr. Quaritch Wales, contested by M. G. Cœdès, the Takuapa harbour on the west coast formed a very good anchorage leading to the Bay of Bandon on the east coast.

Near Takuapa has been discovered the ancient site of Tung Tuk which was identified by Gerini with the Takkola mart mentioned by Ptolemy (2nd century A.D.). Here the brick work of the vestibule of a temple site has been unearthed where stone sculptures and inscriptions have been discovered and ascribed to the eighth century A.D. Close by is the Pra No hill from the top of which a four-armed Visnu image, over 6 ft. high, with Gupta or Pre-Khmer affinities, has been discovered. It is now kept at the National Museum of Bangkok. The ancient Sanskrit name of Giri-Rāstra still survives near Ta Khanon. Another purely Indian settlement is Wieng Sra or the city of the lake. At its centre lay the site San Pra Narai whence three Brahmanical statues were discovered and removed to the National Museum of Bangkok. Here a small sand stone figure of Buddha has been found dating from 6th or 7th century A.D. This Buddha image, only seven inches high, is of the Indian Gupta style. Several statues of Visnu and of Siva have been discovered in this area and these might have served as models to the makers of the earliest images of the Dieng Plateau, West Java. The male and female figures from opposite the Pra Narai hill, Takuapa, are charming samples of Gupta or Pallava art, proving thereby that successive waves of art and culture reached Indonesia through these Malayan colonies.

To the north of the Bay of Bandon lies the important city of Caiya with many remains of Brahmanical cults later submerged by Mahāyāna Buddhism. Here a small bronze Tārā of Indo-Javanese style has been discovered. The

temple of Wat Phra That bears according to Mon. Parmentier, close resemblance to the miniature edifices appearing on the bas-reliefs of Borobudor. Another ruined monument Wat Keu was discovered by M. Cœdès in 1926. This is a big shrine " Constructed on a plan analogous to that of Candi Kalasan in Java, but of which the architecture recalls closely the cubic art of Champā and the Pre-Khmer art of Cambodia." From Caiya several Brahmanic sculptures have been discovered which remind us strongly of Indian proto-types. Bronze Mahāyāna figures have also been discovered. The next important site on the east coast is the famous Buddhist city of Nakon Sri Thammarat. Some of its architectural features remind us of Candi Kalasan of Central Java and the Cham towers of Dong Duong and Mi-Son.

In summing up the results of his investigations Dr. Quaritch Wales observed that there was a strong local tradition in favour of an early migration of the Indians across the route from the West and that colonies of Brahmins of Indian descent survive at Nakon Sri Thammarat and Patalung. Through this country the far off Hindu Colony of Fu-nan (Cambodia) was Indianised by a sage Kaundinya as recorded in *Liang Shu* about the end of the 4th century A.D. The most primitive in style of the Indian colonial temples are to be found near the colony of the Brahmins who traced the arrival of their ancestors from India by an overland route across the Malay Peninsula and not *via* Java or Sumatra. The primitive non-specialised type of Indian colonial architecture gradually influenced the pre-Khmer, Cham and Indo-Javanese architectural types just as the sculptures found in this Trans-Peninsular zone could have served as inspiration to the development of local forms in an Indonesian environment. Indian administrative ideas, ceremonials and the drama also most probably came to influence Siam and Cambodia on the one hand and Java and Bali on the other.

It goes without saying that there were possibly other land-routes and sea-routes in the propagation of Indian culture. It is probable that there were two stages in this cultural migration in the earlier period. There was a slow dissemination from the Bay of Bandon (Pan-Pan), to the then receptive and politically backward states in Fu-nan Champa, and in western Java which, in the second period, gradually became politically and culturally conscious and creative. Then they were capable of pursuing within their borders the evolution of their own distinctive art and culture inspired by India. The Pan-Pan of Malaya probably collaborated with Java, developing the great Sailendra empire. From the inscriptions we learn that the Sailen-

dras were masters of the northern part of the Malay Peninsula in the 8th century A.D.

They were Mahāyānists arriving fresh from India and looking out boldly for fresh conquests beyond the seas. Thus gaining control over the Malay states they organised their conquests of Java and Sumatra. The few sculptures that have been found near Palembang in Sumatra are almost all of the late Javanese style. On the other hand, at Caiya, probably the first capital of Sailendra empire, we have a range of sculptural types beginning with almost purely Indian forms. Scarcity of stone confined the architecture to bricks as was also the case in Champā. From the inscription of the Buddha of Wat Hua Wieng (1183 A.D.) we learn that Caiya was temporarily overrun by their aggressive neighbours the Cambodians and probably that was the reason why the capital was transferred further south to Nakon Sri Thammarat in 1230 A.D. The great Sailendra empire which included Java in the 9th century was weakened progressively by the disastrous war with the Colas in the 11th century, by the attacks of the Khmers in the 12th and by an unfortunate expedition to Ceylon in the 13th century. It finally collapsed as a result of the simultaneous attacks led by the Dai or Thai (Siamese) from the North and by the Javanese from the South.

In the proceedings of the Singapore Congress of Pre-historian, we are glad to find that some new light has been thrown, on the Neolithic culture of Malaya, by Callenfels, Collings and Mijsberg.

CHAPTER VII

ART AND ARCHÆOLOGY OF THE THAILAND (SIAM)

RECENT progress in the study of pre-historic archæology of the Far East has been recorded in the proceedings of the three pre-historic congresses held in French Indo-China (Hanoi), in the Philippines (Manila) and in the Straits Settlements (Singapore). Thus we are sure today that long before the appearance of the Mongoloid Dai or Thai people, the country was occupied by diverse races of different grades of civilisation. Palæolithic implements of the Sumatran type have been found in Malaya as well as Indo-China, and in the intervening region of the Trang-Patalung hills of Peninsular Siam, Neolithic polished tools have been found. This area is still occupied by the ever-dwindling Negrito folks who, in the dim pre-historic Stone Age, crossed over to Siam from South India *via* the Andaman and Nicobar Islands. These curly haired tribes still cherish the legend that their ancestors were the monkeys of the Rāmāyana who escaped from the burning Lankā.

North Siam was colonised by the Lawas, a race different from the Southern Negritos, who were displaced by the more advanced ancestors of the present Cambodians, speaking the Austric Khmer language and connected with the Mundas of Eastern India and the Mons or Talaings of Pegu. From this time onwards this country would be influenced, for better or for worse, by the Cambodians on the one side and the Burmese on the other. The Thai people displaced the Khmers, but both received the first gleam of civilization from India through the Buddhistic and Brahmanical religions. As early as the third century B.C., we hear of Buddhist missionaries being sent to Burma by emperor Asoka. By the third century A.D., we find Buddhist and Brahmanical inscriptions in the Hindu colonies of Champa and Cambodia inhabited by the Khmer people. By that time the virile Thai race who occupied the Yang-tse valley was migrating southwards and began to be influenced simultaneously by Burma and Cambodge. The Thai founded in 8th century A.D. a powerful kingdom in Nan-Chao in Yunnan, South China, whence they emigrated into the fertile plains watered by the Menam and the Mekong rivers. The Khmers were already occupying Cambodia to the East. The Mons formed the kingdom of Dvārāvati to the West. The Malay people founded the vast kingdom of Srīvijaya to the South, and to the North the Lawa tribes of the Mon-Khmer family

have built their centre at Labapuri (Lopburi), one of the most ancient sites of North Siam.

The Thai people asserted their individuality remarkably in the 13th century A.D., driving away the Mons and founding the city of Chieng Mai. So one of their Kings, Indrāditya, waged successful wars against the Khmers and established the dynasty of Sukhodaya. His son Rama Khamheng conquered the whole of Menam valley and the Malay Peninsula as far as Ligor (Nagar Sridharmarāj). They thus "paved the way for the formation of the Kingdom of Siam properly so-called. Its role in the history of Indo-Chinese arts and institutions is not less important than its political role : inheriting as it did the civilisation of the Khmer Kingdom which sank in part beneath the blows that the Thai Kingdom administered, it transmitted to the Siam of Ayuthiya (Ayodhyā) a good number of Cambodian art-forms and institutions which still subsist in the Siam of today" (G. Cœdès, "Origins of the Sukhodaya Dynasty" : *Journal of the Siam Society, Vol. XIV*). After a century, Sukhodaya was eclipsed by the new dynasty of Ayuthiya, founded by Rāmādhipati in 1350, and during this epoch the famous Sinhalese Buddhist reformer Saranankara visited Siam with a view to bringing back to Ceylon the purer traditions of *Theravāda* Buddhism. Ruling Siam for four centuries the Kingdom of Ayuthiya was utterly destroyed in 1763 by its traditional enemies, the Burmese. This ruthless destruction of Ayuthiya partially explains the lamentable lack of dated materials for the history of early Siam.

In 1782, the Chakri dynasty established its capital in Bangkok and the greatest King of this line was Chulalongkorn (1868-1910) after whom the University of Bangkok has been named. A son of this King, Prajadhipok, still lives to remind us of the constitutional revolution of 1932, which led to his abdication followed by the minority regime of his nephew King Ananda Mahidol.

King Rama V or Chulalongkorn had the mortification of seeing one of the richest archæological sites of Siam with the famous monuments of Angkor snatched away by the French who had already captured Indo-China. He gave to the Siamese the first public museum (1874) which is known today as the National Museum at Bangkok, adjoining the National Library founded as early as 1905 named after the Prince-monk Vajirañāna (Vajrajñāna) who became the supreme patriarch of the realm and who was also a poet of renown. The National Library named after him contains the richest collection of Cambodian Pali manuscripts and old Siamese MSS. kept in magnificent lacquer and guilt book-cases. The

Vajiravudh (Vajrāyudha) Library of printed books contains over 25,000 volumes.

King Prajadhipok founded the Royal Institute for Literature, Archæology and the Fine Arts, with the veteran Siamese scholar Prince Damrong as president. He has published volumes on " the Burmese Wars," on " Classical Dancing " and on " Buddhist Monuments in Siam." He warmly received Dr. Rabindranath Tagore and his party visiting Bangkok in 1928.

During the constitutional regime, the Royal Institute was abolished and the National Museum and the Library were placed (1936) under the Ministry of Public Instruction now paying 30,000 ticals per annum. When I visited Siam in 1938, I found that the National Museum controlled ten regional branches : (1) Ayuthiya, (2) Lopburi, (3) Bisnulok, (4) Lampun, (5) Chaiya, (6) Phechaburi, (7) Nagor Pathom, (8) Korat, (9) Singburi, (10) Wat Bencha. These field museums are daily making important discoveries, both Buddhistic and Brahmanical. Archæological activities in Siam have been stimulated by the recent discoveries of the Greater India Research Commission financed by the late Gaekwad of Baroda. The Director of Research, Dr. H. G. Quaritch Wales, as we have shown above, has published several reports on the discoveries of the Hindu monuments in Malay Peninsula, where pre-historic as well as historic sites and objects are being discovered, showing the intimate connection of Siam and the Malay Peninsula with India and the Indonesian world. Systematic and scientific explorations of historical sites have yet to be arranged for and funds are not always forthcoming. Lopburi has yielded to epigraphists Hindu inscriptions of 5th-6th centuries A.D. and, inspite of ravages of foreign invasion, a huge quantity of Buddhistic and Brahmanical antiquities has been found and more may be expected from Ayuthiya, Bang Pa-In, Chaiya and other sites. Already the National Museum of Bangkok appeared to be overcrowded as I found it during my last visit in 1938. It is a real palace consecrated to the preservation of national monuments. The Budhaiswan Hall has in its centre the famous bronze image of Buddha Sihing which is said to have been cast in Ceylon. Here we find also beautiful frescoes adorning the walls, and a unique collection of Buddhist votive tablets. Behind this hall, there is another large building devoted entirely to bronze objects and statues of Siamese, Cambodian and Indian workmanship. Along with the Buddhist images the specimens of Brahmanical iconography could also be found, but unfortunately these have not yet been properly catalogued. The bigger statues are exhibited in the verandah and the last building Phra Viman contains in its nine rooms the best exhibits of modern Siamese art :

royal thrones, conveyances, weapons, musical instruments, dress and masks of the dancers, etc. The Siamese, like their neighbours the Cambodians and the Javanese, are extremely fond of dance and the drama, with the proper costumes and musical accompaniments. The marionette (Hun), the shadow-play (Nang), the mask-play (Khon) and the maskless normal drama (Lakon) are all represented here. We find a good deal of similarity with the Cambodian dancing. We also know that the present Burmese drama got an impetus from the invasion of Burma by the Siamese and of Siam by the Burmese; but inspite of occasional outbreak of hostilities there was a large exchange of art and culture between the various peoples inhabiting this Trans-Gangetic peninsula. With a little more of governmental and technical guidance we may expect great progress in the traditional arts and crafts of Siam, like wood-carving, inlaying, mosaic work, decoration with coloured enamels and glazed tiles, metal work, jewellery, pottery, weaving and embroidery, etc. The Government School of Arts and Crafts in Bangkok is trying to fulfil partially this nation-wide programme. Siam, next to Japan, is the only independent country in Asia which in literature, art and religion stands nearest to India, and any one surveying Siamese art from within will agree with the Siamese scholars who observed : "Most of the motives of Siamese ornament originate in a combination of religious symbolism and a love of nature, and characteristic Siamese pattern work usually contains mythological beings illustrative of some episode of the Rāmāyana and story of the 'Life of the Buddha'" (*Siam*, Vol. I, p. 66; published by *The Bangkok Times Press*).

A great service to the systematic study of Siamese Art has been rendered by Dr. Reginald Le May through his *Buddhist Art in Siam* (Cambridge University Press, 1938), which we recommend to all serious students of Indian and Greater Indian Art.

Art of India and Siam

Dr. Reginald Le May, our leading authority on Siamese Art, classifies the sculpture and art objects of Siam into nine schools : (1) Pure Indian, (2) Mon-Indian, (3) Hindu-Javanese, (4) Khmer and Mon-Khmer, (5) Khmer-Thai transition of U-tong, (6) Thai of Lopburi, (7) Thai of Sukhodaya, (8) Thai of Chieng Saen, and (9) Thai of Ayuthiya.

The small images dug up at Pong Tuk (near Bangkok) have been ascribed by Dr. Cœdès to the Amaravati school of India. These are the earliest Indian images discovered so far in Siam, proving that Indian immi-

gration into Siam had begun by the 2nd century A.D. Another very old Buddhist settlement Pra Patom has yielded many *Dharma-cakras* and other Buddhist symbolic figures. The Sanskrit language was diffused over the extensive area from Siam to Borneo and Sumatra to Champa. Chinese travellers of the 7th century A.D. refer to the country between Burma and Cambodia as Dvārāvatī and its capital was at Lopburi. The sculptures from this area bear a close affinity to the contemporary Gupta art, but very soon about the 4th century a strong Mon influence came to be felt in the features of the Siamese Buddha. The Mon sculptors at first carved figures from quartz, and we find a huge Buddha about 30 ft. high in Pra Paton. Blue limestone came to be used in the 6th and 7th centuries when the Mon artists were creating stone and stucco images of the Buddha imbued with Indian feeling. From Lopburi of 10th-11th centuries have been recovered beautiful black bronze and stone figures reflecting Mon-Khmer spirit, which was followed by pure Khmer types in sand-stones and bronze from Lopburi of 11th-13th centuries. The Mon people occupy for nearly six centuries the whole region from Bangkok in the South to Lamphum in the North. But while Hīnayāna forms prevailed in this part of Siam, the Mahāyāna Bodhi-sattva and Lokesvara figures abound in Peninsular Siam and Malaya, dominated from 8th century onwards by the Hindu Kingdoms of Srīvijaya and of the Sailendras of Java and Sumatra.

In the eastern parts of Siam and the Malay Peninsula (Dvārāvatī) have also been discovered the Brahmanical figures of Vishnu, the Ardhanārīsvara and several Yaksha types developing probably under the influence of Fu-nan (Cambodia). Towards the end of the 10th century a Prince of the Indo-Javanese Sailendra dynasty conquered the lower Menam Valley (capital Lopburi) and also overthrew the Khmer Kings of Cambodia, but Khmer art and culture spread over the whole area from Cambodia in the East to Swankalok lake in the North. The conquering Prince himself may be a Cambodian who overran Siam after getting re-inforced by his Javanese allies.

From now there was a gradual transition from the Mon to the Khmer school at Lopburi. The two people moreover were racially akin, and the influence of the one need not eliminate the other altogether. But while the Mon artist tended to evolve the abstract form of an ideal Buddha, the Khmer artist began to represent truly the human form with an intense individuality of expression which makes such a strong appeal to art-lovers. The Khmers occupied central and eastern Annam for nearly three centuries (10th-13th centuries) when the Thai people had been migrating from China and Shan

States towards Siam; and when the Mongols invaded China, they displaced the Thai people invaded the Khmer empire and established the first Thai kingdom at Sukhodaya and Sawankalok (13th century), producing a complete break with the Khmer traditions of art in Siam and inducing the growth of an indigenous Thai school of art.

There was no sudden break, however, from the Khmer tradition, as we notice in the sculptures of the school of U-tong marking a most happy fusion of the Mon-Khmer and the Sino-Thai types. Most of the Buddha figures of this age of transition (13th-14th centuries) were in bronze. The colossal size of some of the bronze images, according to Cœdès, are a proof of active commercial relations with the ore-producing districts of South China. Chinese tombs also may have supplied some designs for the Siamese temple-towers. From the 13th century, the Northern Thai or Lao people took possession of the North where we notice the first clear change from the Khmer to the Thai styles in the districts of Supan, Kanburi, U-tong, etc., and such toponyms mean " golden land " (Suvarna-Bhūmi) which according to Dr. Cœdès apply more to Siam than to Burma. But the Thai people must have occupied many parts of North Siam and the Shan States long before the 13th century. It is significant, therefore, that Dr. Le May recommends the comparative study of the Buddhist images of the Tagaum group of Upper Burma with the northern school of Siam. Through Siam's contact with Ceylon in the 14th century probably came the flame-like ornament on the head of the Buddha.

In Lopburi, the Khmer tradition continued almost down to the 15th century, when there appeared to be a complete break with the Khmer type.

The regular Thai Kingdom was founded in Siam in the 13th century with the cities of Sawankalok and Sukhodaya as its capital during which we noticed perceptible influence of Ceylon. The Sinhalese form of Buddhism, was introduced into Northern Siam by missionaries from Sukhodaya who profoundly influenced the Northern culture.

We notice also a veritable revolution in art reflecting the conception of a new race quite different from the ideals of the Khmer people. The human realism of Khmer art was slowly replaced by the abstract idealism of the Thai Buddha type.

In 1350, we notice the foundation of the Thai capital of Ayuthya " in which all the earlier forces and currents of art coalesced and came together to form a national sculpture of Siam." Siamese art gradually drifted towards conventional and symbolic representation, which afforded tremendous scope to the decorative genius of the Siamese artists and craftsmen.

If in the delineation of human form Thai art could not compare with the splendid Khmer specimens, the Siamese artists could nevertheless infuse a rare mystery and almost superhuman grace in the figuration of the best Thai Buddhas.

Another branch of study which may lead to fruitful results is the tracing of the Indian motifs in Siamese minor arts like those in lacquer, in gold and silver ornaments, in niello-work and in wood-carving. The Yaksha, the Kinnara, the Garuda, and many such themes entered Siamese art from India. In decorative art also, the Siamese textile stands in close connection with Indian art. These along with other valuable suggestions have been discussed by Dr. Cœdès in his paper " India's Influence upon Siamese Art " (*Indian Arts and Letters*, Vol. IV, No. 1, 1930).

Dr. Cœdès divides Indian influence into 3 successive phases :

(1) Direct Indian influence, up to the end of the 8th century A.D., from pre-Gandhara period through the Amaravati epoch down to the Gupta era, when Buddhist as well as Brahmanical sculptures are found in many places. The architectural remains at Pong Tuk and Pra Paton may belong to this period.

(2) From the 9th to the 13th centuries, Indian intercourse with Siam did not cease but Indian artistic influence was exerted indirectly through the Khmer empire of Cambodia and the Sailendra empire of Java and Sumatra. Khmer architecture and sculpture profoundly influenced the formation of Siamese art, importing to it the massive design of Indian Sikhara tower.

(3) A new type of tower possibly of Chinese origin appeared with the emergence of the Thai people as an independent nation. Siamese Buddhist images now appear strongly influenced by the Pāla Art, which from the age of Nālandā, was influencing the art of Eastern Asia, from China in the North to Java in the South.

Through Burma and Southern China, the Pāla Art helped the formation of Siamese Art which also inherited the motifs from the Gupta Art of Dvārāvatī, from Khmer Art and from the Art of Ceylon. From Sinhalese Art, the Siamese most probably derived the flame-shaped Ushnīsa, the *paryyankāsana*, the drapery arrangements on the left shoulder and the *stūpa* erected on a base representing a row of elephants.

India and Siam

Passing out of the domain of anthropology into that of archæology, we find that Indo-Siamese relations have got to be studied with close and con-

stant reference to developments in Greater India as a whole. This, as we know, comprised the important cultural zones of the Trans-Gangetic Peninsula from Burma and Siam, Cambodia and Champa to Malaya and Suvarnadvīpa (Sumatra-Java). Thanks to the researches of scholars like Cœdès and Dohring, Salmony and Le May, we can study Siamese art and archæology with reference to Indian and Greater Indian history. Reginald Le May has recently made a substantial contribution, as we have shown, to this branch of study through his *Buddhist Art in Siam.* He has shown how, owing to its geographical situation, Siam has been the meeting ground of the cultural influences from all directions, although the predominating influence has of course been from India. The earliest remains belong to the Mon race who brought Hīnayāna Buddhism and the Pāli scriptures. The original home of the Mon people or rather of their aristocracy was probably some part of Telinganā whence they colonised Lower Burma and thence they settled in Siam in the early centuries of the Christian era. From Amarāvatī on the Krishnā and from Tamluk at the mouth of the Hooghly, Indian merchants, missionaries and artists went out in Indian ships to colonise various parts of Indo-China and Indonesia. The Chinese pilgrim Fa-Hien attests admirably to this line of cultural migration. Most of the temples and sculptures of Siam of this early epoch have unfortunately disappeared. A few rare bronzes and sculptures in blue lime-stone are obviously Gupta in style and inspiration. Some terra-cotta heads of great delicacy and beauty have also been discovered, and all these may be classified as the Andhra-Kalinga phase of Siamese art.

The next great cultural influence was that of the 7th century art of the Gupta-Pallavas dominating the history of the 7th century art and architecture. The Pallava capital was at Kāñchī and the researches of Quaritch Wales have demonstrated that Pallava Indians from Kanchi " usually landed at Jaya on the upper part of the Malay Peninsula, and crossed overland in order to avoid the long and perilous sea-voyage." Between the 7th to the 12th century, we find the growth of the Hinduised Kingdom of Srīvijaya, professing Mahāyāna Buddhism and including in its domain, the whole of Malaya and Southern Siam. The Srīvijaya Kingdom was overthrown by the Sailendras whom Dr. Le May considers to be " a branch of the Ganga Dynasty who ruled in various parts of Kalinga and Mysore from the 2nd to the 11th century." According to Quaritch Wales, the Sailendra capital was not Palembang (in Sumatra) but Jaya (in South Siam) whence radiated the inspiration of a new school of sculpture in Java to the South and in Siam and Cambodia (pre-Khmers) to the North.

Towards the end of the first millennium A.D. the mighty Khmer empire of Angkor conquered central Siam, and the Khmer viceroy ruled at Lopburi. That is why some of the temples and sculptures of Lopburi show undoubted Khmer influence. Like the Indian rulers, the Khmer kings were impartial patrons of Brahmanism and Buddhism, both tending to fuse into one another under Mahāyāna influence.

The Khmer rulers were driven out by the ancestors of the Siamese, the Dai or Thai people, who established, about 1100 A.D., their capital at Bisnulok dominating over the territory which had hitherto been Cambodian. During this early Thai period Siamese art was greatly influenced by contact with the neighbouring Kingdom of Pagan, which rose to be the centre of Burmese revival in religion, architecture and painting under the great Kings Anoratha (1044-1077) and Qyanzittha (1084-1112) who were in close touch with the Pālas of Bengal (750-1100). The classical Siamese art, specially the sculpture of this period, " shows marked traces of Pāla influence." This was also the time when the Siamese Kings of the Sukhodaya Dynasty conquered the whole of the Menam valley and the Malay Peninsula, where a little before the great Chola Kings had introduced influences of South Indian art and culture. So in this Pāla-Chola phase of Siamese art we may expect to find, with the progress of Siamese archæology, some striking parallelisms in art and culture.

In the mediæval period of Siam with Ayuthiya as capital (1350-1763), the Indian influence would be on the wane, and Siam would come more and more under the influence of Chinese art, specially in architecture. Discussing some of the temples of this period, Dr. Le May observes : " The buildings are splendid examples of the period, especially the massive, solid *stūpa*, the beautiful façade of the *vihāra* which is of wood, the pinnacled entrance gateway gleaming white in the sun, and the long eaves of the roof which come down low and lend an air of mystery to the interior." Burma being connected with Ceylon through the Hīnayāna, the Buddhists of Ceylon began to visit Siam as the repository of ancient Buddhist scriptures and pure traditions of Buddhism. In the reign of Sūrya-vamsa Mahādharmarājādhirāja, a series of Jātaka engravings were made for the temple of Wat Si Jum (*circa* 1361 A.D.) which, according to Dr. Coomaraswamy " exhibits a very close affinity with the Jātaka frescoes of the northern temple at Polonnaruva in Ceylon, datable in the 12th or 13th century." From a contemporary, inscription of 1361, we know that a very learned Sangharāja (Saranankara ?) came to Siam by invitation from Ceylon, and possibly some Sinhalese artists began to visit Siam, introducing their own technique and draftmanship.

Before the Ayuthiya regime we notice that Gupta-Pallava influences dominated over the art of Siam. Unfortunately only a few specimens have survived the ravages of time, specially from the twin capitals of Sukhodaya and Sajjanālaya called in Siamese Sukhotai-Sawankalok, which under the Hinduised Khmers reached the zenith of their power in the 11th century A.D. The Cambodian influence extended over the vast area from Lopburi to Kedah and Ligor in Jaya. From Jaya, Gupta-Pallava influences penetrated southern Cambodia through Southern Siam as evidenced by the Vishnu from Vien Srah, Lokesvara from Jaya, Buddhas from Dvārāvatī and other art relics from Rājapurī, Prapathom, Chantaburi, Kedah, Takua-Pa and Ligor. At Pechaburi, there are ruins of Brahmanical and Buddhist temples, and at Nagor Pathom, the biggest temple Pathom Chedi resembles Indian *stūpas* dated *circa* 500 A.D.

Though the official religion of Siam today is Buddhism, yet there can be no doubt that there was perfect tolerance of non-Buddhistic cults like Sivaism, Vaishnavism, etc., as we find in the ancient Hindu colonies of Indo-China and of Indonesia. In the early 5th century A.D. all these countries were under the ministration of Buddhism as well as of Brahmanism. Hīnayāna probably reached earlier by way of Burma, but Burma, so long considered to be purely a Hīnayāna country, is yielding many important relics of Brahmanical religion and art (*vide* : Dr. Niharranjan Ray, *Brahmanical Gods in Burma,* Calcutta University, 1932). During the 5th and 6th centuries we find Hīnayāna dominating over the whole Central Siam, including the States of Rātpuri, Kānchanaburi, Nagor Pathom and Lopburi. The fine stone statues and sculptures discovered plentifully in Nagor Pathom and Lopburi clearly show that the influence of Gupta art was very strong in Siam from the 5th to the 7th century. During the 7th century, Hīnayāna Buddhism spread from Lopburi to Northern Siam through the zeal of a Mon Princess. The Mons dominated over North Siam from the 7th to the 13th century, and built splendid towns like Haripuñjaya and Nagor Lampang, adorned with gorgeous Buddhist temples, some showing "a marked Ceylonese influence," as for example, the Wat Kukut (Kukkutārāma ?) near Lamphun. So far few Brahmanical sanctuaries have been discovered in North Siam, but copious evidence of Brahmanical culture has been traced along the western coast of the Malay Peninsula, in the present circle of Bhuket where fine stone sculptures representing Vishnu and other Brahmanical deities have been found. They probably date as far as back as the 5th or 6th century (*vide* : *Siam,* Vol. I, p. 62 and pp. 126-136). In some famous shrines of Lopburi there are

images of four-armed Vishnu (Narai), Indra, Lakshmi, Nārāyana on Ananta Nāga, and several Rishis.

Most of these Siamese states during these epochs were under the suzerainty of Fu-nan, the great Khmer empire embracing Cambodia, Siam and the whole of Malay Peninsula. In the 10th-11th centuries A.D. Cambodia conquered the empire of Fu-nan including South Siam, and tried, though without success, to conquer Northern Siam also. The Cambodian influence was specially manifest in patronising stone-architecture. Hitherto the material used for the sacred buildings was generally well-burnt bricks, stone being rarely used. Now we find imposing stone temples with towers (*prang*) in the cities of Sukhodaya, Svargaloka, and Lavapurī. Eastern Siam which adjoins Cambodia naturally showed later domination of the Cambodian style of architecture with *prāsāda* or tower surrounded by walls or galleries, adorned with beautiful reliefs in sand-stone or laterite. Sometimes when the stone was rough, a kind of stucco was used for decorative purpose, in which fine moulded reliefs were executed. Many Hindu gods and goddesses appear in the Siamese sculptural iconography of this epoch, although Mahāyāna sculptures are found in the splendid temple of Bimai, which can easily be confused with a Cambodian temple.

A new style of architecture emerged during the 11th-13th centuries which is the combination of the Cambodian and the Thai styles—a natural reflexion of the regime where we find the Thai dominating over the Mon and the Khmer peoples. The best examples of this new style of architecture are found at Sajjanalaya, Svargaloka, Sukhodaya and Bishnuloka.

During the Ayuthiyan period the earlier religious styles were partially continued, but bricks came to replace stones, and that is probably the reason why so few of the structures of this period have survived. The inscriptions, however, continued to be engraved on stone, and the images of the Buddhist and Brahmanical deities carved in bronze or stone. The biggest bronze image of a sitting Buddha is to be found within the crumbling walls of the Jaya-mangala temple (Wat Jaiya Mongkol) in Ayuthiya. The date of its casting is not definitely known, but it is recorded that a Siamese king transferred the colossal image to the present site in 1603. Ruthless destruction of monuments and records followed the conquest of Ayuthiya by the Burmese after three years' siege (1763-1767).

Bangkok and Her Monuments

Bangkok was founded, within a few years of the destruction of Ayuthiya, by King Rāma I (1782-1809), who drove back the Burmese invaders and

gained some victories in Cambodia. The Royal Palace and two famous temples Wat Phra Keo and Wat Phra Jetubon (commonly known as Wat Po) were built by him. His son Rāma II (1809-1829) constructed Wat Sudat and Wat Arun. During the reign of Rāma III modern Siamese art and poetry reached its climax. He paid special attention to the conservation of temples and buildings. His brother Rāma IV (1851-1868) who was a Buddhist monk for 27 years before his accession was a man of profound learning. As King Mongkut he began the work of modernizing Siam, the work which was carried further by his son King Rāma V Chulalongkorn (1868-1910). By his varied and many-sided activities Chulalongkorn is remembered and loved by his people as their greatest King. But he had the mortification of losing some important parts of his territory through a collusion (1893) with the French in Indo-China and with the conclusion of the Treaty in 1907, Siam ceded to France those Cambodian provinces, where the grand ruins of Angkor are situated. The progress of Siamese art and archæology during the reigns of King Vajiravudh and King Prajadhipok has already been described. The Sesqui-Centenary of Bangkok (1782-1932) was celebrated by the last King Prajadhipok, who repaired many of the historical structures.

Towards the end of the 18th century, King Rāma I built several imposing edifices of which two are in good condition : the Dusit Maha Prasad and the Phra Tinang Amarindra, both within the precincts of the Grand Palace. The visitors are admitted by the Gate of Supreme Victory or *Pratu Vises Jaisri*. The Dusit Maha Prasad is considered to be the first specimen of recent Siamese architecture, and ever since the reign of King Rāma I, the palace is being used both for the coronation of the kings and for the lying-in-state of royal remains. It also contains an interesting relic in stone carved in 1292 by King Rāma Khamheng of Sukhodaya, son of King Indrāditya who liberated the Thai from the Cambodian yoke. It was discovered by the learned King Mongkut among the ruins of the old capital whence he brought it to Bangkok. A series of halls were marked as places for distributing *dakshinā* (*taksin*) or offering to the monks made by the Sovereign King : *Chakrabati Taksin*. In the interior part of these halls, the Amarindra palace and in one of its *sālā* or rooms, King Rama I was offered the crown by the people in 1782. Brahmanical ceremonies of *abhisheka* and other rituals were practised here in continuation of Cambodian traditions, and a garden to the east of the palace is still called Shivalai or Shiva's abode.

Next in importance stands the temple of the Emerald Buddha or Wat Phra Keo. Containing as it does the jewel image of the divine teacher, this grand edifice contains nevertheless, carved figures of Vishnu on Garuda

as well as many interesting scenes from the *Rāmāyana* painted on the walls. In the holy of holies we see on the top of a gorgeously decorated altar and under a golden canopy, the much venerated jasper image of Buddha known as the Phra Keo Morakot. The transparent greenish jasper which goes to make the image is a single piece 60 cms. high, quite unique in the world of gems. According to tradition this image was made by the King of the Gods for the famous Indian monk Nāgasena. Passing from India to Ceylon, it reached the Thai city of Chieng-rai about 1436, and after several peregrinations through the capitals of the North-Eastern Thai kingdom, was finally installed in Bangkok. The walls of this temple are covered with frescoes representing the life or legends of Buddha. The style of these paintings no less than their subject-matter, sometimes Buddhistic, sometimes Brahmanical, should be compared with the pictorial traditions of the Burmese and the Cambodian neighbours of the Siamese. In the Mahāmandapa or the library of the Pantheon (Prasad Phra Debbidorn) a valuable collection of Siamese *tripitakas* is kept. It was completed in course of a famous religious council held at Bangkok in 1788.

Wat Phra Jetubon or Wat Po (Bodhi) is the most extensive temple in Bangkok, to the south of the Grand Palace. It was built in 1793 on the site of an earlier temple called Wat Bodharam. Over 400 images, brought from ruined or deserted temples of Siam, have been conserved in the galleries of this temple. *Rāmāyana* scenes are represented on the wonderfully carved teak-wood doors inlaid with mother of pearl. The walls and ceilings of the shrine are covered with Buddhist paintings, many of which have been sadly damaged but have been repaired. In the eastern *vihāra* there is a huge standing Buddha in bronze 10 metres high. It was brought down from Ayuthiya, just as in an adjoining room we find another image brought from Sawankalok which was Siam's capital during the 13th and 14th centuries. Other images, of Buddha Jinasrī with *nāga*-hood, perhaps were brought down from Lopburi. Along with Cambodian, the Chinese influences also penetrated Siam, and we find therefore numerous traces of the simultaneous existence of the Brahmanical, Buddhistic and Taoist cults.

The Wat Mahathad or the great relic shrine is the oldest sanctuary on the east bank of the Menam. This temple was the seat of the great religious council of 1788 which purified and re-established the authoritative edition of the Siamese *tripitaka*; 112 gilt images of the Buddha as well as those of his chief disciples are found within this temple. Wat Sudat is decorated with carvings representing Indra mounted on his three-headed elephant. There is a huge brass Buddha 9 metres high attributed to the Sukhodai regime, and

on the base of the altar are stone sculptures in Gupta style hailing from Nakon Patom and representing the great miracle of Srāvastī. The doors and windows are decorated with painted figures of Rāma, Vishnu, Siva, Skanda, Ganesa, Umā, Lakshmī and other Brahmanical deities. In the front of Wat Sudat is the Brahmanical temple Bot Phram in which we find many Hindu deities hailing from Cambodia, Ayuthiya and Lopburi, the most remarkable being a statue of Dancing Siva. Buddhists by profession, the Siamese Kings nevertheless keep Brahmanical priests and astrologers who play an important role in all state functions in Baṅgkok. There is another colony of Brahmins in the Southern Capital, Nakon Sridharmarāja, in Siamese Malaya.

Wat Sraket on the Golden Mount marked an important sanctuary, and on the long side-walls we find frescoes of religious and historical interest. There is a place for cremation in Wat Sraket, and probably that is why the Hades of Buddhism, with Yamarāja judging the evil-doers, is represented in the wall paintings. On the Golden Mount the faithful assemble by thousands in the month of November to worship the bone-relic of the Buddha which was discovered at Piprawa in Bihar Province in India in 1898. The Government of India distributed these precious relics amongst the four leading Buddhist countries of Ceylon and Burma, Siam and Japan.

On the river bank just opposite Wat Po we find the famous Wat Arun. Its central tower is 74 metres high and all the five towers are crowned with *triśūla* symbol of Sivaism while in the niches we find the figures of Indra, Chandra and other deities. To the south of Wat Arun, lies the Temple of the Beautiful Friend or Kalyāna-mitra, named in Siamese Wat Kalayanamit. Its central *vihāra* boasts of the tallest and the largest roof among the numerous temples of Bangkok. It is not possible in a brief survey to enumerate fully the architectural remains of Siam, and to discuss adequately their special features. Geographically as well as artistically, Siam appears to be the meeting-ground of the Cambodian and Burmese art traditions, and if Siamese architecture appears to be much less impressive than the superb monuments of Cambodia or Java, yet none can deny that the Thai people have made a great contribution to the decorative arts of Asia. Their wood-carving, painting and other branches of applied arts, when thoroughly studied, would reveal new secrets in the domain of decorative technique, and we hope that before the valuable materials crumble away, the Government of Siam would arrange to publish adequate studies on the various branches of Siamese art, in collaboration with *connoisseurs* of oriental art.

CHAPTER VIII

ART AND ARCHÆOLOGY OF INDO-CHINA

THE Indo-Chinese Peninsula, by its very name, is expected to bear traces of the inflow and inter-mixture of two principal currents of culture, those of India and of China. During the last centuries before the Christian era, as pointed out by M. Cœdès, the influence of China and India began to operate on the peoples of Indo-China who just entered their Metal Age. Before they knew how to make general use of metal, they continued to live in a sort of Stone Age, which, as in Japan, was much less ancient than the Stone Age of Europe. That probably explains why the Indo-Chinese stone implements are often found at a slight depth and associated with bronze and even iron objects. Two distinct types of stone tools have so far been recognised : (1) implements of cut-stone with polished edges, and (2) shouldered-axes which are supposed by some pre-historians to be connected with a people belonging to the Mon-Khmer linguistic group.

The earliest studies on these subjects were published by the workers of the geological survey of French Indo-China led by M. Mansuy. His collaboratrice Dr. Mlle. Colani was specially commissioned by the *École Française d'Extreme-Orient* to make a systematic survey of the pre-historic antiquities of Indo-China, partially explored by Dr. Van Stein Callenfels (in 1932 and 1935). In the north of Annam they discovered shell-mounds and kitchen-middens containing bone tools, broken earthenwares, etc., which may testify to the culture of a Melanesian population, whose traces Dr. Callenfels found from Indo-China and Java up to Japan and possibly beyond.

Dr. Colani has also studied the megalithic civilization of upper Laos which may be connected with the megalithic culture of the Malay Archipelago specially that of Sumatra. With the Stone and Bronze age remains, monolithic jars and stone burial places were discovered in Laos which have been attributed to the Iron Age of the early centuries B.C. The menhirs, on the contrary, may belong to the Bronze Age and some imported articles have been noted to be of funerary character : coloured glass-beads, stone-axes, bronze ornaments, knives and agricultural tools, etc., which the dead persons might wish to utilize.

Towards the beginning of the 2nd century B.C., on the fall of the Ts'in

dynasty, a Chinese general who became independent of the Central Government, conquered Tonking and Annam, and Chinese rule lasted there for nine centuries or up to the advent of the Annamite dynasty of the Dinh in 968. Thus it is quite clear today that the primitive populations of Indo-China were connected with those who people the Pacific islands now-a-days and that the Mongolians were late-comers in Indo-China.

The earliest traces of the Stone age culture of Indo-China were discovered by Verneau, Mansuy, Patte and Colani. In the caves and rock-shelters of the Bac-Son limestone massif in North Tonking, a type of neolithic Indo-Chinese culture called Bac-Sonian was discovered and discussed at the First Congress of the Pre-historians of the Far East at Hanoi (January, 1932). But owing to the lack of systematic methods of excavation, the palæolithic tools were found lumped together with proto-neoliths, just as the human remains were found to be of Melanesian Australoid and Indonesian affinities.

This mixture may be found to have an additional significance when we consider that a veteran anthropologist in the Polynesian field like Dr. E. C. Handy (*vide* E. S. C. Handy, "The Problem of Polynesian Origins"' *Bishop Museum Occasional Papers*, Vol. IX, No. 8, 1930) refers to the theory that the *Arii* or *Alii* culture of Polynesia may be traced back to the river population of Kwang-tung (South China). They are supposed to be an intrusive Oceanic folk from Indo-China or Indonesia who as refugees of some disrupted civilization established themselves as the ruling class in Polynesia, tracing the origin of the Polynesian race and culture to Indo-China as their original home. (*Congress of Pre-historians*, Singapore, pp. 51-58, 313-316).

Dr. Colani discovered Palæolithic culture in the caves of the Hoa-Binh province of Southern Tonking, and this has been classified as follows :

(1) Hoa-Binhian I—big, crude palæolithic tools;

(2) Hoa-Binhian II—smaller palæoliths together with proto-neoliths;

(3) Hoa-Binhian III—more improved tools and with gradually disappearing proto-neoliths; we notice also the absence of the Indonesian racial type associated with proto-neoliths;

(4) The bone implements discovered in North Annam may be quite different from the cultures of Hoa-Binh and Bac-Son, and a more intensive research is necessary to ascertain the exact position of the folk using bone implements. We are not yet sure if they were related to the Melanesians using tools of Palæolithic type, or to the Indonesians generally associated with proto-neoliths. At any rate we are fairly certain today that the present-day cultures of Melanesia, Micronesia and Polynesia could be ultimately connected with the pre-historic peoples and cultures of Indo-China.

Hindu Culture in Indo-China

The exact date of the penetration of the Hindus and of Hindu Culture in Indo-China is not yet settled. But we have noticed that an eminent authority like M. Cœdès, the Director of the French School of Hanoi, is inclined to believe that the Hindus had already colonised that area during the second and first centuries B.C. and his conclusions are strongly supported recently by Mr. O. C. Gangoly adducing independent evidence from Indian literature which strongly corroborated the archæological evidence (" Relation between Indian and Indonesian Cluture " : *Greater India Society Journal*, Calcutta, 1940). The late Prof. Sylvain Lévi also in a brilliant paper (*Ptolémee, le Niddesa et la Brhat-Kathā* : *Études Asiatiques, II*, 1925) expressed his opinion that the occurrence of Sanskrit names of some parts of the Trans-Gangetic Peninsula and of the sea-ports of the Far East in Indian texts of the 1st century A.D. proved, beyond doubt, that Hindu Culture might have penetrated there at least a couple of centuries earlier. The earliest Hindu colony comprised Cambodia, Cochin-China and Southern Siam, called by the Chinese as Fu-nan (? Vana-rājya), and it was visited, according to local traditions, by the Brahmana Kaundinya who married a native Princess called Nāginī Somā and became Lord of the Country in 1st century A.D. This was the beginning of the Indo-Khmer dynasties ruling Cambodia for over 1,000 years, sharing the Peninsula with the Indo-Cham rulers of Cambodian (and ultimately of Indian) origin. This explains why the oldest Hindu monument there is the Sanskrit inscription of Vo-Canh (2nd-3rd centuries A.D.). It records the name of a King of the Srī-Māra dynasty, and gradually we find that the Hindu colony of Champā came to be divided into Kauthāra (Nahtrang), Panduranga (Phanrang), Vijaya (Bindinh) and Amarāvatī (Tra-Kieu=Simhapura or Indrapura), the last place with its gorgeous temple city of Mi-son was founded by Bhadra-varman I (400 A.D.) who ruled Champā about the same time that Sruta-varman ruled over Cambodia (Funan). The Classical Period of Cham Art extended from the 7th to the 10th century A.D. when the art of Champā showed a rare grace and power of modelling, as we find from the sculptures of Mi-son carefully conserved in the Museum of Tourane. The images of Siva and Umā, of Skanda and Ganesa, testify to the Saiva preponderance. In the 9th century, the first brick temple of Pārvatī replaced the wooden temple of Po Nagara near Nahtrang (817 A.D.).

About 900 A.D., the only Buddhist shrine in Champā, that of Dong-Duong was founded by the Buddhist King Indra-varman in honour of Lokes-

vara. Here a bronze standing Buddha was discovered which may be of Indian or Sinhalese origin reflecting the style of Amarāvatī and Anurādhapura of the 3rd or 4th century A.D. The Dong-Duong shrines belonged to one period while the monuments of Mi-son were erected at various dates (7th-10th centuries). There was also the cult of the Deva-rāja or King-God. The Hindu culture of Champā was gradually overwhelmed by the Chinese Annamites who became masters of the whole country by the 14th century A.D.

While the Indo-Cham style of the art of Champā has not yet been clearly traced, there is a distinct growth of Indo-Khmer or pre-Khmer style of the 5th, 6th and 7th centuries A.D. These differ from the classical Khmer art of 9th-12th centuries. Of the Indo-Khmer period we find a Bull capital (Sivaite) at Vyādhapura and the figure of a four-armed Vishnu in Ananta-sayana pose at Han-chei near Sambour. Many other shrines in brick and laterite have been discovered, which resemble the Gupta shrines of the 6th and 7th centuries A.D. The Buddha figures from Romlok, Trakeo (5th or 6th century A.D.) resemble, according to Coomaraswamy, the rock-cut Buddhas in the precincts of Cave XIX at Ajantā, and also some Gupta figures from Sārnāth. The Pre-Khmer Art of Cambodia has given some remarkable specimens of Brahmanical iconography, like the Hari-Hara preserved in the Sarraut Museum at Phnom Penh, and reminding us of the Pallava art of 7th century A.D.

The Kingdom of Fu-nan appeared to have been overshadowed by another Kingdom called Chen-la by the Chinese, owing allegiance in some form to the Hindu-Javanese Empire of Srīvijaya. With the establishment of Khmer autonomy in the 8th century A.D., we notice not only a political but an artistic revolution as well. The earlier Indian style was characterised by a rare sense of modelling and concentration possible only in the assertion of individuality of the artists in their creations. The classical Khmer art, on the contrary, is a colossal co-operative venture in art-creation, producing sculptures and architectural types that baffle our imagination in variety no less than in grandeur. There is a sort of resemblance with the evolution of the Sikharas of Indian temples; but the Khmer architecture proper was mainly derived from indigenous wooden types as well as from samples of Chinese architecture which influenced the classical art of Cambodia as well as of Champā. Some of the non-Indian elements are, as pointed out by Dr. Coomaraswamy, towers with human faces, Garuda caryatids, and Nāga balustrades. A national, almost racial, element asserts itself in the sculptures of this period. But the religion and mythology remained dominantly

Indian, pertaining to Siva, Vishnu, or gods of Tantric Mahāyāna Buddhism. To these were added the cults of Deva-rāja or deification of royal ancestors which formed the common custom in Cambodia and Java, and it is significant that the inscription of Sodo Kāk Thom (1042 A.D.) states that the Deva-rāja or King-God was first erected and the cult was initiated by King Jaya-varman II (802-869 A.D.) expressly with the object that Cambodia should be independent of Java or Srīvijaya.

M. Trouve, Conservator of Angkor, has discovered a sanctuary built upon a three-stepped pyramid on the terraces of which are some pavilions and this pyramid is pierced from top to bottom by a well which, according to inscriptions, was dedicated to Siva Gambhīresvara. This temple of Prasat Ak Yom may belong to 6th-8th centuries and classified as primitive Khmer or pre-Angkor monument.

The entire chronology of the Cambodian monument has been revolutionised by intensive researches of the last ten years. In the wandering maze of theories we thank M. Cœdès for his first clear and convincing presentation of data in his admirable paper " Archæology in Indo-China " (*Indian Art and Letters*, Vol. VIII, pp. 22-35). He agrees with M. Goloubew that the original site of Yasodharapura, founded towards the end of the 9th century by the Saiva King Yasovarman I, was not covered by the present town of Angkor Thom; it was, on the contrary, a much larger area which has yet to be surveyed and excavated. The central mound of this city is identified with Phnom Bakheng with a Siva temple crowning its summit. So the earliest monuments of Angkor were of Saiva denomination. From the Sanskrit inscriptions on the walls of the Angkor Thom, M. Cœdès could prove that centuries after the Saiva construction of Yasovarman I, Angkor Thom or Bayon came to be hurriedly covered with Buddhistic monuments erected by the Buddhist king Jaya-varman VII (1181-1201) towards the end of the 12th century after the sacking of Cambodia by the Chams in 1177.

Thus we get two definite dates, that of Yasodharapura (end of 9th century) and that of Bayon (end of 12th century). In between came a series of monuments which we mention chronologically : Mebon, Pre Rup, Banteay Srei, etc., belonging to the 10th century; the Vishnu temple of Ba-phuon (end of the 11th century); the colossal Vishnu temple of Angkor Vat (12th century) followed by a series of buildings Prah Khan, Ta Prohm, Banteay Kedei, Banteay Chamer—distinguished by towers with human faces which characterise the Angkor Thom representing the last flowering of Khmer art under the Buddhist king Jaya-varman VII.

Unlike the hard stone temples of India and Java, the Khmer monuments were built either of brick or sand-stone of bad quality; moreover, their foundations were weak, and their construction defective. Inspite of that M. Henri Marchal after visiting the scientific reconstruction work of the Dutch archæological survey, repaired effectively several dilapidated shrines and galleries of Bayon, and reconstructed parts of the *Gopuram*. So the beautiful 10th century temple of Banteay Srei, formerly called Isvarapura which was badly damaged, has been successfully repaired, as we find from the splendid volume on the temple published in the Archæological Memoirs. M. J. Y. Claeys, Inspector of the Archæological Survey, has published special articles on the restoration work in the *Annual Bibliography of Indian Archæology*. The Buddhist shrine That Luong at Vieng Cham in Laos has also been repaired, according to the principles of restoration admirably put into practice by the Dutch archæologists in Java.

Jaya-varman II who is reported in inscription to have come from Java, ruled over Cambodia from 802-869, and the last notable Cambodian King Jaya-varman VII, as we know, reigned from 1181-1201. Thus the history of Classical Cambodian Art extends over 400 years, naturally passing through various phases of progress and retrogression. Jaya-varman II was a great builder who founded three capital cities Amarendrapura (Banteay Chamer), Hariharālaya (Prah Khan), and Mahendra-parvata (Beng Mealea). Ignoring the imported foreign style of South Cambodia, the King and his Khmer architects showed real creative genius and originality by utilising in stone the national wooden architecture of the Khmer people, with their wooden forms and tiled roofs reproduced in stone.

Indra-varman I (877-889) claimed to have been the descendant of an Indian Brahman named Agastya, thereby suggesting his South Indian origin. He planned and constructed some brick towers within Angkor Thom and also a Siva temple of Ba-kong with a pyramidal base in five receding stages crowned by a *lingam* shrine. The whole foundation was enclosed by a wall and moat with bridges guarded by many-headed *Nāgas* on both sides as elaborately described by M. Parmentier in his treatise on " The Art of Indravarman."

King Yasovarman (900 A.D.), hitherto considered to be the builder of Angkor Thom, may be credited with the construction of the Vaishnava shrine of Phimenakas, a three-storied pyramid with a stone gallery above, occupying the court between the royal palace and the terrace. Yasovarman is credited with the excavation of a huge artificial lake with the shrine of Neak Pean in the centre. Rājendravarman (944-968) built two Brahmanical

shrines Pre Rup and Mebon in the middle of this great lake. In the Mebon shrine five brick towers were dedicated to Brahmā, Siva, Pārvatī, Vishnu and a *lingam.*

To the north-west of Angkor Thom and to the south of the palace lies the remarkable Vaishnava temple of Ba-phuon constructed by Jaya-varman VI (end of the 10th century). Of the three receding terraces, the two upper ones are decorated with reliefs from the *Mahābhārata, Rāmāyana* and *Krishnāyana,* proving beyond doubt that Krishna legends and stories of the Vishnu Purāna must have migrated to Indo-China before 10th century A.D. Buddhist and Brahmanical cults were in a process of fusion as we notice specially in the reign of Sūrya-varman I (1002-1050) who was a great and zealous builder of many temples : Ta-keo dedicated to Siva; Prah Khan containing Buddhist as well as Saiva deities and Prah Vihear dedicated also to Siva. Sūrya-varman II (1112-1152), gained immortality by starting the design and construction of Angkor Vat, the biggest stone temple in the world. It was probably finished by his nephew and successor Dharanīndra-varman (1152-1181). According to M. Finot, the Angkor Vat was originally a smaller Nagara temple beside the larger shrine of Angkor Thom. Later on it was converted into a grand palace temple, colossal in dimension and extraordinary in artistic designs and decorations. The master artists and sculptors of the age of Sūrya-varman II were really responsible for all the phenomenal progress in the architectural and decorative art which came to be mechanically and hurriedly copied or multiplied by the mediocre artisans of that ambitious King Jaya-varman VII (1181-1201) who, according to the latest revised chronology, was responsible for the consruction of Angkor Thom or Bayon.

Volumes have been written on these two gigantic Cambodian foundations. Angkor Vat was originally a Vaishnava shrine, and Vishnu occupies a prominent place in the superb stone reliefs, some of which are devoted to Saiva legends also. There is a perceptible falling off from this high standard in the execution of Bayon or Angkor Thom under Jaya-varman VII (1181-1201). He was a Buddhist introducing Buddhist sculptures and motifs, and still we find a veritable eclecticism in the 34 deities found in Bayon, classified into (1) Hindu (Vishnu, Siva, Umā, etc.), (2) Buddhist (Bhaishajya-guru and other Bodhisattvas), (3) Patron deities, (4) Deified human beings represented by portrait images making a sort of a National Pantheon, and (5) the Deva-rāja-lingas.

In 1195, Jaya-varman VII, extended the power of Cambodian arms as far west as Pegu, and Cambodian influence may already have penetrated

Siam and Burma, for we find that the Khmer language was still in use at Jaiya about 1250 A.D. But the Thai or the Siamese began to grow in strength occupying a large part of Cambodia and introducing Siamese Buddhist sculptures in the 13th and 14th centuries. In 1296, as described by the Chinese traveller Chou Ta Kuan, Cambodia was ravaged. The famous Angkor Thom was deserted before the end of the 15th century, and from the later inscriptions of Angkor Vat we get unmistakable evidence of the penetration of Hīnayāna Buddhism from Siam. Only in the court of the Cambodian King at Phnom Penh some Brāhmana priests still continue (as in Siam and Burma) to perfom some ceremonies and rituals. The world-famous monuments of the temple city of Angkor which passed into the hands of the Siamese Kings were again taken back to the present boundary of Cambodia, when after a brief Franco-Siamese struggle the French took the monuments under their care by the treaty of 1907. Nine years before in 1898, the French Government transformed the Archæological Commission of Indo-China (started after the French conquest towards the middle of the 19th century) into the now famous *École Française d'Extreme-Orient.* Up to 1929, this brilliant research school was under the direction of M. Louis Finot, and for the last ten years M. Georges Cœdès, its second Director, is developing the research department, the library and the museums in diverse ways. The sculptures and other archæological objects have been treasured in the Museums of Saigon, of Phnom Penh, of Hue and of Tourane. There is a project of establishing an Ethnographic Museum at the hill station of Dalat in South Annam.

The most valuable collection, as I found after my two visits to Indo-China, was that of the Museum at Hanoi, which has been reorganised and renamed since 1932 as the Louis Finot Museum. An admirable catalogue of the Khmer collection of this Museum by M. Henri Marchal has recently been published which we specially recommend to the students of archæology. Outside Indo-China a select and valuable collection of Khmer art has been beautifully arranged and exhibited at the Musée Guimet of Paris on which Madame Odette Monod-Brühl has published an excellent catalogue which will be of great help to the students of comparative art.

The school of Hanoi has no teaching department, and it confines its activities exclusively to researches into the domain of archæology, philology and history of Indo-China and other countries of the Far East : India, Insulindia, China, Japan. Its library has a rich collection of Chinese texts comprising about 4,000 works in over 18,000 volumes. The Annamite texts number about 4,000, and the Japanese collection numbers 10,000.

There are over 1,500 manuscripts in Cambodian, Cham, Laotian and Siamese, and Burmese, etc.

As early as 1900-1901, eminent French scholars like Paul Pelliot and Edouard Huber visited China and brought valuable collections. So Japan was visited by M. Maitre and M. Peri; and M. E. Gasperdone is collaborating with the Japanese scholars in compiling the famous cyclopædic dictionary of Japanese Buddhism in French, the *Hobogirin*. So Java, Ceylon and India, Burma and Siam were also visited by the scholars of the school, and it is well-known how valuable are the contributions of French savants like Foucher, Finot, Parmentier, Cœdès, Goloubeff, Marchal, etc. The *Bulletin and Memoirs* of the School are monuments of original research.

Out of the valuable collections of the Hanoi Museum we may mention the following as of special interest : The Stone Age and the Bronze Age tools found in the Peninsula; the historical bronze drums from Tonking; funerary articles from the ancient tombs of Annam; ceramic products of the Sung dynasty; porcelain and bronze statues from Cambodge and Siam; wood-sculpture and bronze Buddhas from Laos; the famous bronze Buddha of Dong Duong, and the Bodhisattvas from Champā; jade, lacquer, bronze and porcelain objects from China; wood-carving and Buddhist figures from Japan; copper-gilt figures from Tibet; and sculptures from Gandhāra, Magadha and other parts of India.

The old Museum building was thoroughly reconstructed between 1922-1926. and was finally inaugurated in 1932. The art of Champā being mainly represented in the Tourane Museum, and Cambodian art being housed in the splendid Museum of Phnom Penh (Albert Sarraut), only the choicest specimens of those two schools of art are exhibited in the Hanoi Museum. It contains, however, a rich and representative collection of the art objects from Siam, Burma, India, Tibet, China, Korea and Japan. Thus the *École Française d'Extreme-Orient*, together with the valuable Library and the Museum, stands today as one of the most important research centres for Asiatic Art and Archæology.

NOTE :—On the pre-history and proto-history of Indo-China, some valuable papers have been communicated by Dr. J. Fromaget, M. E. Saurin and Dr. Colani and published by the Congress of Pre-historians of the Far East, Singapore, 1940.

CHAPTER IX

ART AND ARCHÆOLOGY OF SUMATRA

IN the history of Malaysia we find Java deservedly getting major attention. But thanks to the researches of anthropologists and prehistorians, we have come to discover the importance of Sumatra as well; and we must remember in this connection the splendid services rendered by Edwin M. Loeb and Robert Heine-Geldern.*

Of the three old races found in Southern Asia, the first, the Negrito, has not been found in Sumatra, being limited to certain zones of the Malay Peninsula, the Andamans and the Philippines. The second, the Veddoid people, are seldom found unmixed with races of other blood, the purest remnant so far traced being the Senoi or Central Sakai who may be connected with the Toala of Celebes, according to the Swiss anthropologist Sarasin. Traces of Veddoid blood are found from the sources of Irrawaddy to south-west China, according to Heine-Geldern. Kleiweg de Zwaan considers the Veddas of Ceylon to be the survivals of the pre-Dravidian races once occupying the whole of India. In Sumatra, the more primitive Malaysians are pronouncedly Veddoid. They represent the pre-agricultural economy, using bows and arrows, wearing *tapa* cloth, but lacking pottery, metal-work and weaving.

The third race, the Indonesians or Austronesians, are believed by Heine-Geldern to have migrated from South China after 2000 B.C. Those who are relatively free from racial mixtures are called proto-Malaysians, dwelling in the hilly interior of the Island, like the Bataks, the Dayaks (Borneo), the Toradja (Celebes) and the Igorot (Philippines). The mixed Malays are best represented by the modern Javanese and are mainly coast-dwellers. They brought tropical plants, sugarcane, banana, bamboo, especially rice or *bĕras*, meaning fruit or food. According to Krom their language contains both the words for boat and sail, and Heine-Geldern holds the opinion that they had some form of outrigger canoe. Thus these Indonesians probably knew both river-craft and ocean-craft which enabled them to explore the Pacific. On archæological and ethnographic grounds Heine-Geldern has attributed the following traits to the primitive Indonesians : non-coiled pot-

* "Sumatra : Its History and People" by Edwin M. Loeb; "The Archæology and Art of Sumatra" by Robert Heine-Geldern : Published by the Verlag des Instituts fur Volkerkunde, University of Vienna (1935).

tery, mats, bone lance-points, bone tools and arrows, stone and mussel rings (as coins or decorations), stone-beads, pile-dwellings, megalithic monuments, head-hunting, cultivation of rice and millet, and the possible use of *tapa* or bark-cloth—in common with their younger Oceanic cousins, the Polynesians.

According to Loeb, the Indonesian social organization was similar in form to that of the Negrito and the Veddoid folks which ignored the " unilateral descent and the accompanying exogamy." Autocratic kingship was absent. The divine descent of chiefs is a Polynesian concept prevailing partially among the chiefs of Nias. Summing up the problem of the races and cultures of Sumatra, Loeb observes that " wave after wave of cultural influence had swept over the island from the direction of India, bringing certain of the groups to a high state of civilization." The primitive Malaysians of the Peninsula, so far as we could judge by the Jakun tribes, refused to assimilate any culture from India, pre-Hindu or Hindu. They had no system of sacrificial feasts, but they evolved some kind of pottery of neolithic origin, though this art found little favour. With the advent of more Malaysian settlers from the mainland, the Negritos were exterminated and the Veddoids pushed back into the more barren parts of the island. Among the earliest traits of culture received by the Malaysians of Sumatra we find the pile-house, outrigger canoe, sail-boat, taro, yam and sago and domestication of pigs and chicken. Many of these things will migrate from Malaysia and Indonesia to far-off Polynesia, supporting thereby the theory that many important items of Polynesian culture could be traced back to the region extending from Indo-China to Sumatra and Java. The most common feature is the " men's house " which grew out of the pile architecture. The people divided their villages into several hamlets each under its own leaders. They learnt the dry cultivation of rice and domesticated the buffalo, and possibly evolved iron-working, before the intrusion of Hindu culture, towards the beginning of the Christian era.

The Hindus suppressed head-hunting and megalithic cults, introducing a different variety of stone-work and more refined cultures as could be gathered from the religion and the soul-concept (*tondi*) of the Bataks, wet-rice culture and plough, and cotton and the spinning wheel, together with the higher Hindu concepts of religion and life which enabled the primitive Malaysians to develop their crude villages and hamlets into vast commercial and cultural empires. The Malayans like the Hindus were a composite of all races and could march ahead with the time, while the Mentawei islanders who refused ot admit strangers in marriage remained in a most backward

state, like the Kabu and allied people of Sumatra. The Mentawei has animal sacrifice and augury but lacks the ideas of higher gods, creation and shamanism which came with Hindu culture. In this connection we quote the following significant remark of Loeb : "The Bataks and the people of Nias have derived practically all of their more advanced forms of religious beliefs from India, for the most part in post-Hindu times. Certain of these higher forms of beliefs, cults and philosophies have traversed Indonesia and have passed into Polynesia, and perhaps even, as some ethnologists believe, into the New World." One significant difference lies in this that in Indonesia the important factor in religion is *tondi* or soul-concept, while in Melanesia and Polynesia it is *mana* or supernatural power.

While in Java, the land of the *Pithecanthropus Erectus*, human skeletal remains of the early palæolithic period have been found, no such discoveries have been made so far in Sumatra which is largely a vast unexplored area. Heine-Geldern, however, has classified (culturally, if not chronologically) the late palæolithic tools as belonging to a flake-culture and a hand-axe culture. So far the traces of the flake-culture have only been discovered in two caves of Central Sumatra. These have been connected with the flake-cultures of Ceylon and of the caves in South-West Celebes, belonging to the late palæolithic age.

Traces of hand-axe culture were found in many places in the northern part of the east coast of Sumatra. These stone tools are different from the old palæolithic hand-axes of Europe and India, being worked almost without exception on one side only. The hand-axe culture of Sumatra is now admitted to be "related to the Hoabinhian and early Bacsonian of North-Eastern Indo-China and the hand-axe cultures of Siam and the Malay Peninsula." And from this analogy Heine-Geldern considers it probable that the bearers of the Sumatran hand-axe culture belonged to the group of Papua-Melanesoid races and that they may have been followed by the Indonesian or primitive Malaysian peoples who transmitted the earlier neolithic or later proto-neolithic tools with rough ground edges and rubble-axes. The late palæolithic flake-culture, on the contrary, was probably introduced by people of Veddoid origin.

The late Neolithic culture is represented, both in Sumatra and in the Nias island, by quadrangular adzes which were probably brought by the Malayo-Polynesians (Indonesians) to Malay Peninsula and Indonesia by way of China, Laos and Siam between 2000 and 1500 B.C. With these we also find beaked adzes, stone sawing, megalithic monuments, ancestral figures, head-hunting, rice-cultivation, domestication of cattle and the out-

rigger canoe. This late Neolithic culture is the same in Java and Sumatra both showing preference for semi-precious stones and refinement in stone-cutting which reflected a keen sense of beauty as well as perfection in craftsmanship.

Megalithic Art of the Nias Island and of South Sumatra

The quadrangular adze culture is closely connected with the megalithic system and it still survives, according to Heine-Geldern, in many regions of Further India and Indonesia, specially among the mountain tribes of Assam and of North Luzon (Philippines) and in the island of Nias. Connected as it is with ancestral cults and magic, the art of Nias is predominantly plastic and monumental, with symbolical reliefs and statues of the deceased, etc. which play an important part in the megalithic style of south-east Asia. The sculptural reliefs decorating some of the stairs in Southern Nias are considered to be the most beautiful creation of primitive Indonesian architecture. The people of South Nias showed a remarkable preference for stone reliefs as, for example, in the scene where four monkeys are catching a shark. In Central and North Nias we find stone monuments to be more and more rare. Many stone sculptures like the conventionalised figures of stags and horn-bills appear to be copies from wooden models, and Nias is specially rich in wood-carving of ancestral and guardian figures, mostly naked though wearing ornaments. Many of these figures holding cups with both hands remind us of the beaker statues of Eastern Europe, Siberia and Central Asia.

The wooden architecture of the houses of the chiefs appears to strive after creating the imposing architectonic forms of the megalithic art of Southern Nias. This pre-Hindu megalithic art came to be influenced later on by the Indian and Javanese motifs.

In South-West Sumatra, on the plateau of Pasemah, have been discovered a very important group of megalithic monuments—menhirs, dolmens, cist-graves and stone images. But unlike the art of Nias which is primarily monumental and static, the sculptures of Pasemah, in rendering the physical world, display a wonderfully dynamic conception. The native racial types are rendered in a naturalistic style which, through an exaggeration of movement and passion, look like caricatures. In carving the images these South Sumatran sculptors utilise as far as possible the natural form of the stone medium. Fragments of paintings (in black, white, red and yellow) found on the inner walls of the cist-graves display the same violent movements as of the stone sculptures. These Pasemah monuments have been link-

ed by Van der Hoop with the late bronze culture unearthed near Dong-Son, in Annam, which may be dated between 600 to 300 B.C., when this bronze culture began to penetrate Sumatra and South-East Asia from the North.

Sumatra, China and India

According to Heine-Geldern, the Pasemah sculptures do not belong to the megalithic culture which reached Indonesia in the late neolithic age but they are related to the Chinese sculptural art of the early Han period. Both the sculptures and the paintings remind us of the decorations of the tombs of the Han period; and most possibly the Pasemah art, like the art of the Batak, would be found on deeper analysis to be composed of heterogeneous elements of the different epochs. Heine-Geldern has characterised the three chief stylistic strata as (1) the old megalithic symbolic style, (2) the bronze age style of Dong-Son (*circa* 300 B.C.), and (3) the Hindu Sumatran style following the Dong-Son and the Han epochs. Specially in the art of the Bataks we find Indian influence becoming more and more pronounced : elephant (*gadja*), horned-lion (*singa*), as in Pallava art, Indian magical and astrological figures in the Batak books of divination with figures of Brihaspati, Rahu, etc. Lastly, we must mention the representation of the Kalmāshapāda-Sutasoma Jātaka which the Bataks, like their Burmese and Shan neighbours, use in two variants.

Thus we see that even at this infancy of Sumatran archæology we have remarkable documents to illustrate the transition from the Late Neolithic to the Bronze Age culture and thence to the Indian and Indo-Javanese phases. About 300 B.C., Sumatra received the Late Bronze and early Iron Age Dong-Son culture : socketed bronze-celts, drums, daggers, lances and figurative painting. It was brought to Sumatra probably by merchants and colonists from South China and North-East Indo-China. A later phase of this culture shows the stone cist-graves and the Pasemah sculptures closely related to the art of the early Han priod (3rd century B.C.).

From the beginning of the Christian era to the 14th century A.D., the Hindu-Sumatran culture flourished under the influence of Hindu colonists and missionaries, both Brahman and Buddhistic, from Burma and Siam, Cambodia and Java.

Sumatra was not only colonised by the Hindus but, through more than a thousand years of close connection, it became an integral part of the Greater Indian culture zone : the Pallava influences in the 7th century, the Chola domination of the 11th century, together with other intrusions from the

Tamil and the Kerala countries, signify South Indian contributions. Dravidian tribal names are still to be found among the Bataks, who, however, follow the father-right economy as against the mother-right of the Minangkabau. So far as North India is concerned, we should remember the close connection of Buddhistic and Tāntric cultures of Eastern India with the empire of Srīvijaya : the relation of the Sailendras with the Pāla empire and Nālanda, with Nepal and Tibet, all collaborating to develop the extreme Tāntric Kāla-cakra-yāna, combining Buddhistic with Saivite elements, during the reign of Kritanagara, Maulivarman and Adityavarman.

The earliest Hindu-Sumatran stone image of Buddha found near Palembang has been considered by Prof. Krom to be influenced by the Amarāvatī School. Other remains found at Palembang and Djambi have been attributed to the 5th century A.D., nearly 200 years before the foundation of the Srīvijaya empire (7th century A.D.) which readily came under the influence of Pallava art. A stone torso and the life-sized statue of Avalokitesvara bear the impress of 7th century Pallava art. It is interesting to note in this connection that in the four inscriptions, in Pallava script of the 7th century A.D., found in Sumatra and Bangka, we find Sanskrit words interspersed with the Old Malay idiom. The Sailendra dynasty of Srīvijaya contributed greatly to the propagation of Mahāyāna in Indonesia and Malay Peninsula. Two Buddhist statues from Djambi show clear affiliation with the Gupta art of 7th century A.D. Three charming bronze images of Buddha, Avalokitesvara and Maitreya, found in the Komering river near Palembang, show the style of Central Java (8th-10th centuries). In this period Central Javanese influence is traced also in some architectural remains, and Sivaite sculptures. Lokanātha with two Tārās, in a bronze group, dated 1024 A.D., is found in the Batak territory of Padang Lawas. According to Dr. Bosch, the Hindu-Sumatran architecture had a special preference for brick construction interspersed with stone sculptures and brick reliefs : and from the Nāgari inscriptions these brick structures are attributed to 12th century A.D. Gradually, the Tāntric cults and degenerate Mahāyāna were overwhelmed by Batak cannibalism, with the worship of Heruka and the cult of human flesh and blood as we find from the inscriptions of King Adityavarman, who died towards the end of the 14th century.

CHAPTER X

JAVA IN ASIATIC HISTORY AND CULTURE

I

Pre-historic Archaeology of Java

THE importance of Java in the study of Asiatic pre-history can hardly be exaggerated. As early as 1889-91, Prof. Eugène Dubois (at present Curator, Palæontological Museum, Haarlem) was excavating, on the Trinil river the remains of fossil mammals. In 1890, he discovered the earliest trace of fossil man associated with fossil mammals of the Pleistocene age. Later on, he changed his opinion, characterising it as "Ape Man," although later researches tend to treat the *Pithecanthropus Erectus* as really a primitive type of *man*, on account of its exceedingly large brain volume and of its definitely erect posture. In 1909-10, a German expedition excavated at the Trinil site and confirmed the theory of Dubois that the fossil mammals found therein belonged to the Old Stone Age. In 1922, a new site of fossil mammals was discovered in the bed of the Glagah river near Cheribon in Western Java. These fossil-bearing sites have been systematically surveyed by the Geological Survey of the Netherlands East Indies, and the latest report on the findings of the Dutch archæologists has been furnished by Dr. G. H. R. von Koenigswald (*vide* "A Review of the Stratigraphy of Java and its Relations to Early Man"—*Early Man*, New York, 1937). We are thankful to him for his able and up-to-date monograph communicated to the symposium on the occasion of the 125th anniversary of the Academy of Natural Science of Philadelphia.

While Eastern and Central Java still remained submerged, Western Java, emerging out of the sea, served as the cradle of the oldest mammals, and in the Tji Djoelang zone have been discovered typically Siwalik fauna : hippos, pigs, antelopes, small cattle, and the stegodon of the primitive elephant family. This zone of Java has, therefore, been correlated with the Tatrot zone of the Siwalik series of India. In 1936, a Javanese collector found a fossilised human skull in the Djetis zone near Modjokerto, west of Surabaya. This *Homo modjokertensis* was found in a layer older than that of Trinil. The Trinil zone fossils, showing stegodon, a large elephant very similar to the Indian *Elephas Nomadicus*, may therefore belong to the middle

Pleistocene. Remains of stegodon and elephant, discovered also in Formosa and the Philippine Islands appear to suggest that the migration of these animals to Java was from the north to the south, and that " the first pliocene migration of the *Siva-Malayan* fauna was completed by a second *Sino-Malayan* immigration." It is not unlikely that the *Pithecanthropus Erectus* came to Java from China with the Sino-Malayan immigration, during which were added to the old Siwalik mammals, orang gibbon, tapir and Malayan bear, all appearing in the Pleistocene fauna of South China. It is significant to point out in this connection the recent observation by Dr. Weidenreich (*Nature*, February, 1937) saying that the *Pithecanthropus Erectus* is more advanced than the *Sinanthropus*, and that the skullcap of Trinil may even belong to a small female of the younger Solo Man. In 1935, the first series of stone implements were found in the Trinil level (*vide* Koenigswald, " Early Palæolithic Stone Implements from Java," *Bulletin of the Raffles Museum*, Series B, No. 1, Singapore, 1936). Near the south coast of Central Java, not far from Patjitan, stone tools of the old Palæolithic types were discovered on terraced surface in 1935. Here were found the same types of flakes as in the Trinil, as well as true hand axes, which came as a great surprise. For, the farthest eastern point at which these implements were known until now was Madras. Dr. Helmuth de Terra, however, discovered hand axes of the same type in the Narbada Valley and in other localities in northwestern India. It can therefore be expected that the stone implements from Java will make for good correlations between the Pleistocene of Java and of India.

In 1931, the late Mr. C. Ter Haar of the Dutch Geological Survey discovered another rich fossil site near Njandong on the Solo river. Various fossil remains of the Solo Man, more developed than the Trinil Man, appear to show great affinities with the Rhodesian Man from South Africa, and both may belong to the Neanderthal group. The stone tools of this Solo Man are crude, but his bone implements are beautifully executed. The newly discovered Wadjak Man probably belonged to a proto-Australoid population living in Java (Sampung cave) in the Neolithic period.

Thus we may agree with Dr. Koenigswald when he says that the fossil mammals of Java bear relations with those of India and China. Probable cousins of the *Pithecanthropus Erectus* have been found near Peking in 1929-30 and near Khol-Larsen in South Africa in 1936. Relations of the Rhodesian Man, or the African type of Neanderthal Man have also been found in Java, and the stone implements, too, show the same wide distribution of early human cultures. Thus we are sure today that the Chelleo-Acheulean

hand axe cultures of England and South Africa, of Portugal, India and Java testify to the migration of the culture of Early Man over an enormous area. The relationship of the Solo Man with the Neanderthal Man has, however, been contested by Oppenoorth (vide *Early Man*, 1937); and Keith, in his *Antiquity of Man*, considers the Rhodesian Man as different from the Neanderthal Man, who is characterised by stone tools, while both the Solo Man and the Peking Man have bone tools as well, and the two probably represented independent cultures of the Far East which have not yet been successfully correlated with the cultures of the fossil man of Europe.

Archaeological Studies in Java

In 1935-36, Dr. P. V. van Stein Callenfels made the first systematic survey of the *Melanesoid Civilizations of Eastern Asia*. I regret the premature death of this pioneer whom I had the privilege of meeting in the galleries of the splendid museum of Batavia. He found evidences of a Melanesoid civilization in a rock shelter called Gua Lawa near Sampung (East Java). The bone tools discovered there have been compared by him with those found in Hoa-Binh (French Indo-China) and also with those found in the kitchen-middens of northern Annam as well as in Celebes, whence the bone culture appeared to have reached Java from the North. Thanks to his pioneer researches, there is now a trained pre-historian on the staff of the Archæological Service of Java; and we are in a position to distinguish Palæolithic, the Proto-neolithic and the Neolithic layers of Javanese cultures. Dr. A. J. Van der Hoop by his valuable study on the *Megalithic Remains in South Sumatra* drew our attention to the fact that there are several peoples in the Archipelago whose cultures can still be characterised as megalithic. Their cults and traditions should be promptly studied before being submerged by the invading modern culture. Collaboration of foreign scholars has therefore been invited by Dr. W. F. Stutterheim, the present Director of Archæology in the Netherlands Indies (vide *Indian Art and Letters*, Vol. XIII, pp. 90-101, 1939). He links up the pre-historic with the historic periods of Javanese culture by characterising the next important epoch as " Hinduistic." As against the older theory that the Hindus conquered and populated Java between the first and the sixth century A.D., Dr. Stutterheim opines that the Hindus were " disseminators of their culture," towards the beginning; but they were mixed with and absorbed by the native population which transformed and adopted the new culture, following the Javanese, the Sumatran or the Balinese conceptions. He concedes, how-

ever, that " constant contact with India, perpetuated by commercial *traffic* in times of peace, infused an ever-renewed flow of Indian elements."

The learned Director gives us valuable indications with regard to the recent activities of the Department of Archæology. While there is little chance of discovering a second Borobudur, it is encouraging to note that more than thirty terraced sanctuaries have been discovered (1935) in the jungles on Mt. Penanggungan in East Java. So, very interesting architectural specimens have been found in Central and Eastern Java, including one rare type of *stūpa* so difficult to find in Eastern Java. Valuable objects of arts and crafts in wood, ivory or textiles are ruined by the humidity of the soil, and only stone and metal objects and pottery could be preserved, as we find from the splendid collection of the Museum of the Royal Batavian Society of Arts and Sciences. The Society has recently been enriched by over 3,000 specimens of Chinese and Further Indian ceramics, which, when systematically studied, are sure to throw valuable light on the chronology of Javanese antiquities.

The Royal Batavian Society of Arts and Sciences

A worthy tribute to the Society has been paid by Dr. F. D. K. Bosch, the retiring Director of Archæology, who very kindly guided my steps during my tour through Java and Bali. He recounts the History of the Society (vide *Bulletin of the Colonial Institute of Amsterdam*, Vol. I, No. 2, 1938) and pointing to the date of its foundation, 24th April, 1778, characterises the *Koninklijk Bataviaasch Genootschap van Kunsten en Wetenschappen* as " the oldest scientific body of Western origin in Eastern Asia." J. C. M. Radermacher, a member of the council of the Dutch East Indies, founded the Society and gave it the motto " For the Common Weal." Meeting premature death in 1783, he left, nevertheless, a great legacy of idealism to his successors.

During the English occupation (1811-1816) Thomas Stanford Raffles, as Lieutenant-Governor of the Indies, came to be the President of the Society and encouraged the study of ethnology, religion and antiquities of the Javanese people which came to be the regular features of the Proceedings of the Society. In 1860, the Government, for the first time, decided to grant the Society the annual subsidy of 8,000 guilders; and a few years later a royal decree enabled the Society to possess a suitable building to house its library and its growing collection of antiquities and ethnography. Thus before the celebration of its first centenary in 1878, the Society could

proudly show a noble museum and a valuable record of research. Its rich library attends to five departments—(1) Native Customary Laws, (2) Language, Geography and Ethnology, (3) Law, (4) Social Economics, (5) International Problems.

The Museum of the Society includes seven divisions devoted to ethnography, archæology, manuscripts, numismatics, ceramics, music and the pre-history of the Indies. The first two divisions display valuable exhibits giving a complete survey of the culture of the people from the Hindu period to the present day. The nucleus of the ceramic collection (dating from the 1st to the 18th century A.D.) was donated by Mr. E. W. van Orsoy de Flines. A remarkable collection of musical instruments and gramophone records helps the study of native music (*vide* Kunst, "The Music of Java," *Indian Art and Letters*, Vol. VIII, 1934). The pre-historic collection, although last to be added, is no less important. In its "Gold Chamber" the Museum treasures precious gold images, ornaments, etc., from the ancient Hindu period to the heirlooms of the native princes and nobles of today. Some of the most important and beautiful specimens of Indo-Javanese art in stone, bronze and precious metals can be found only in the historic Museum of the Society. It publishes, ever since 1853, its periodical *Tijdschrift voor de Indische Taal, Land en Volkenkunde*. It publishes also the texts and translations of ancient Javanese works in the *Bibliotheca Javanica* and also the Archæological Reports in collaboration with the *Oudheidkundige Dienst* or the Archæological Service in the Netherlands East Indies which recently celebrated its Silver Jubilee.

The Archaeological Service

Though a regular service was started only in 1913, the Government made archæology a subject of state concern as early as 1901, following the example of British India reorganising its Archæological Department under Lord Curzon and that of French Indo-China founding its famous *École Française d'Extrême Orient*.

At the suggestion of Mr. J. W. Ijzerman, the Committee in the Netherlands East Indies for Archæological Research at Java and Madura was formed in 1901. The renowned Dutch philologist Dr. J. L. A. Brandes was the Chairman of the Committee, which published 12 volumes of reports describing in detail the important statues and sanctuaries of the Hindu period (before 1500 A.D.). It attended also to the conservation of monuments, as we find from the excellent restoration of the Borobudur, under the super-

vision of Col. van Erp. Dr. Brandes, before his premature death in 1905, laid the broad outlines of the study of Javanese Art and Archæology. In 1910, Dr. M. J. Krom was appointed Chairman of the Committee, and restored order in the chaos of materials accumulated, as Head of the Research Service. On June 14, 1913, the Committee was dissolved, and Dr. Krom became the first Director of the newly founded Archæological Service. Serving in Java for five years, he returned to Holland (1915) and was appointed Professor of Archæology at the Leyden University. Dr. F. D. K. Bosch succeeded Dr. Krom as Director, and managed the Department admirably for twenty years. During this period many historical structures that were damaged past recognition or lay buried under the debris or layers of ashes were successfully restored. Thanks to the watchful care and expert guidance of Dr. Bosch, some of the great monuments of Indo-Javanese Art were thus restored and rebuilt without violating in the least the canons of scientific archæology or of aesthetic appeal, so much so that archæologists from the famous *École* of French Indo-China accepted the Dutch method of reconstruction as their model. Between 1901-1913, Tchandi Pawon and Tchandi Mendoet were restored and partially reconstructed according to the instructions of Dr. Brandes. The great temple of Borobudur was restored by Col. van Erp (1907-1911). We note here chronologically the restoration of the following important temples : the Nāga and the Era temple at Panataran (1917-1918). Badoet (1926), Sewoe (1928), Kalasan (1929), Sari (1930), Singasari (1937). The most important and expensive restoration was that in connection with the famous temples of the Prambanan group. After ten years of preliminary operations, the enormous project of reconstructing the principal temple of the Lorodjonggrang group at Prambanan was taken up in 1937. Sustained work of such a type necessitated the establishment of an office of the architectural section of the Archæological Service at Prambanan (Jogjakarta). This temple dedicated to Siva originally was nearly 160 ft. high. Its reconstruction was interrupted through lack of funds, and when it was resumed in 1937, the Department could only hope that it would be completed within seven years. The temples of Bali had also to be attended to, and Sumatra, as yet indifferently explored, would also give plenty of scope to archæologists in the future. Organised revival of Balinese art is the aspiration of the 150 and odd members of the Association of Balinese Artists " Pita Maha " at Oeboed in South Bali (*vide* Kats, " Modern Art in Bali," *Indian Art and Letters*, Vol. XIII, 1939).

In Bali as well as in Java, the cultural influences of India are decisively demonstrated not only in architecture and sculpture but in some important

branches of decorative art, and, above all, in the noble art of dancing. The basis of this art may be traced to the primitive Malayo-Polynesian races and cults, but the gorgeous super-structure and the soul of the art is admitted to have come from India,, the land of the *Nātya-sāstra.* Dutch specialists like Dr. van Lelyveld and Dr. Bake (who spent years in Dr. Tagore's Santiniketan) agreed that Javanese theatre and dancing should be studied in close relation with the art traditions of India (vide *Indian Art and Letters,* Vol. IX, 1935). The plastic art of Java and Bali could be best understood and appreciated if one is helped by the living commentary of rhythm supplied by their art of dancing. This I felt, from day to day, during my pilgrimage through Java and Bali (*vide* "Greater India Revisited," *The Modern Review,* 1926). Discussing this subject with eminent Javanese and Dutch authorities like H. H. Mangkoenagara VII, the Sultan of Jogjakarta, Dr. Bosch, Dr. Schrieke, Dr. Callenfels and others, I came to realise what a vast field of research lies ahead of us, tracing the migration into Indonesia and transformation therein of the *Nātya-sāstra* traditions of India. The best schools of Javanese dancing are those maintained by the enlightened Sultans, H. H. the Mangkoenagara and the Pakoe Alam, of Surakarta and Jogjakarta, to whom every lover of Asiatic art should be grateful for their artistic zeal and munificent patronage.

Another most promising field of comparative study points to the bronze statues and cult objects of Java and India. From the Andhra-Kalinga period of the early centuries of the Christian Era, through the schools of Ajanta, to the grand epochs of the Gupta, Pallava, Pala and Chola empires, Indian plastic arts have been influencing the Javanese art of stone carving and bronze casting. We are thankful to Dr. A. J. Bernet Kempers (*vide* "Hindu Javanese Bronzes," *Indian Art and Letters,* Vol. IX, 1935), for having opened this promising line of research with a comprehensive monograph on the subject.* But our famous bronze collections scattered in different museums, including even the most valuable finds like those from Nālandā and Kurkihār, have not yet been adequately catalogued and photographed. This stands in the way of our learned colleagues of Dutch East Indies and of French Indo-China, who often fail to get photographs from India for attempting a comparative study. Compared with our Indian Museums and art societies I found the photographic department and the

* *Vide* Bernet Kempers, "*The Bronzes of Nalanda and Hindu Javanese Art,*" Leyden, 1933.

news service of the French and the Dutch Archæological Survey more efficient and helpful and the quality of the photographic documents far superior.

India and Java

In our section on the "Art and Archæology of Malaysia" we have tried to demonstrate how it is no longer possible to discuss Indo-Javanese history and culture detached from the main current of the cultural migrations from India to Indonesia and Malaysia. Recent excavations in Malay Peninsula have proved beyond doubt that these migrations operated as much through the land routes as through the sea routes. As early as 2nd century A.D. a Greek geographer like Ptolemy was vaguely conscious of this fact, and that is why we find the Trans-Gangetic Peninsula occupying such an important place in his geography. Ptolemy refers to Java as *Jabadiou* (=Yava-dvīpa) which is translated as the "Island of Barley" proving beyond doubt that the Hindu colonists had already Sanskritised the name of the island. Prof. Sylvain Lévi while discussing that part of the *Rāmāyana* where Yavadvīpa-Suvarnadvīpa is mentioned in connection with the search for Sītā, ascribed that passage of the epic to a date not later than the 1st century A.D. (*vide* Bijanraj Chatterjee, "India and Java," *Greater India Society Bulletin*, 1933). My esteemed friends Dr. Bijanraj Chatterjee and Dr. Niranjan Prasad Chakravarti have happily collaborated to demonstrate that, from the early Christian centuries, India and Java furnished documents relating to religion, art and literature as well as epigraphic materials, down to Saka Era 1300, or 1378 A.D. These Sanskritic inscriptions from Java, Sumatra, Borneo and Malay Peninsula should be carefully studied along with the corpus of inscriptions found in Champā, Cambodia, Siam and Burma, and this line of comparative study is bound to enrich the domain of research into Indian epigraphy. This has been demonstrated through the valuable book of Dr. Bijanraj Chatterjee on *Hindu Culture in Cambodia*, and of Dr. Bahadur Chand Sastri's monograph on *The Pallavas in Java*. The most outstanding work along this line is that on *Suvarna-dvīpa* (Vols. 1 and 2, 1937-1938) by Dr. R. C. Majumdar, the learned Vice-Chancellor of the University of Dacca. He has rendered a signal service to the cause of Indology by reproducing as well as enriching the discussions of the Dutch antiquarians whose writings remained so far inaccessible to our Indian scholars. He links the Sailendras of Java with a definite Indian princely line, the Sailodbhavas of Orissa, who most probably were the progenitors of the Sailendra emperors of Java.

Starting with political and economic relations Dr. Majumdar has given an exhaustive survey of the culture and civilization, of art and archæology of the whole Malay Archipelago, Sumatra, Java, Borneo, Celebes and the Philippines. Everywhere we notice the simultaneous existence of Brahmanical and Buddhistic cults, often tending to fuse into one another, and producing peculiar images of Vishnu, Garuda, Ganesa, Siva-Buddha complex, Bhairava, etc., found in different parts of Malay Peninsula. Interesting specimens of architecture and sculpture of Indian derivation have been found in Palembang (Srīvijaya), in Jambi (Malaya) and in the Tapanuli region in Padang Lawas, all in the vast island of Sumatra. In the island of Borneo, Sanskrit inscriptions were traced by K. F. Holle in 1879 in the native state of Kutei, East Borneo. The local Sultan presented four inscribed stones to the Batavian Society, and when they were published by Prof. Kern, they proved to be the now famous Yūpa Inscriptions of King Mūlavarman, son of King Asvavarman. These valuable Sanskrit records from Borneo were re-edited and published by Dr. Vogel in 1918. Since then many specimens of Hindu architecture and iconography have been discovered in Borneo, and these latest discoveries are promptly announced by that admirable publication, the *Annual Bibliography of Indian Archæology* published by the Kern Institute of Leyden. The most interesting discoveries are the images, both Saiva and Buddhistic, found recently in Genung Kombeng in Borneo—Mahādeva, Kārtikeya, Ganesa, and Vajrapāni and other Boddhisattvas. Among the regalia belonging to the Sultan of Kutei there is a golden figure of a tortoise worn by the crown-prince on ceremonial occasions. The most beautiful bronze image of Buddha was discovered at Kota Bangun near Muara Kaman in Borneo. It may rank with the best Buddha figures of Borobudur. Dr. Majumdar is inclined to postulate " a direct Indian influence in the case of the bronze Buddha figure of Kota Bangun and in the figure of Ganesa at Sarawak " (*vide* Journal Str. Br. R. A. S., Vol. 85, 1922). In the island of Celebes a fine bronze Buddha was found on the bank of the Karama river on the western coast. Dr. Bosch traced it to the Amarāvatī school of sulpture, for it can be clearly distinguished from the Indo-Javanese and Indo-Sumatran type. Dr. Majumdar is inclined to characterise this bronze Buddha image from Celebes, as well as a similar one found long ago at Dong Duong in Champā (Annam), as belonging to the early Gupta period. He noted in his informing volume how, even the far-off islands of the Philippines, close to Borneo, have yielded some specimens of Indian iconography : as early as 1820, a Siva image of copper was found on the island of Cebu which may be of Indian or Indo-Javanese affiliation. The second is the figure of a

female deity in gold sitting cross-legged and richly decorated with head dress and other ornaments. It was found (1920) in a ravine on the left bank of the Wawa river near the town of Esperanza, Agusan province, Mindanao. No wonder then that India has been considered, by most of the antiquarians working in this field, as the principal source of inspiration for the people of Malaysia whose art as well as literature bear strong impress of Indian genius. A preliminary study along that line has come from a zealous pupil of Dr. Majumdar, writing on *Indian Influences on the Literature of Java and Bali* (*by* Himansu Bhushan Sarkar, *Greater India Studies*, No. 1, Calcutta, 1934).

The earliest literary documents of Java are the Sanskrit inscriptions (4th century A.D.) in Pallava script of a King named Pūrnavarman of the Hindu Kingdom of Taruma (western Java). In middle Java traces of Indian influence are more extensive, as attested by the inscriptions of Cangala (732 A.D.) and of Dinaya (760 A.D.) and the inscription of Candi Kalasan (778 A.D.). The last inscription refers to the Mahāyāna cult of Arya Tārā and the earlier inscriptions may have reference to the Deva-rāja (God-king) cult originating in Java and extending to Cambodia and Champā. The Kalasan inscription possibly supports the theory that Prambanan might have been the capital of the Srīvijaya empire which extended its sway over Java, Sumatra and Malay Peninsula. Towards the beginning of the 9th century A.D., Cambodia under Jaya-varman II asserted her independence of Srīvijaya. King Balaputra-deva of Suvarna-dvīpa was applying (860 A.D.) to King Deva-pāla who in his Nālandā copper-plate ordered the building of a monastery and the granting of villages to maintain the same for the benefit of the pilgrims from Indonesia. The Tanjore Chola inscriptions of Rājendra Chola (1030 A.D.) and of Rājarāja Rājakesarīvarman (1044-1046) refer to the King of Katāha and Srīvijaya.

This King was Cūdāmani-varman of the Sailendra dynasty who supported a Buddhist temple at Nāgipattanam (Negapatam) which was called Sailendra Cūdāmani-varman Vihāra in an inscription of Kullotunga Chola (1084 A.D.). Rājendra Chola claimed to have conquered Katāha and Srīvijaya "beyond the moving seas." In the 11th century the famous Bengali monk Atisa Dīpankara spent ten years in Sumatra completing his studies in Buddhism before starting for Tibet. From these chance discoveries we come to be confirmed in our conviction that cultural relations between India and Indonesia continued, with more or less vigour, through centuries. Pūrna-varman's inscriptions of 4th century A.D. referred to the cult of Vishnu. In the 7th century A.D. we find a series of isolated temples and sculptures in the Dieng Plateau showing clear analogies with the Gupta,

Pallava and early Chālukya styles of India. The temples are named (no doubt in later periods) after Arjuna, Bhīma, Ghatotkaca, Sikhandi, etc. The roof structure of Candi Bhima corresponds, according to Dr. Coomaraswamy, with that of a typical Indo-Aryan *Sikhara* or dome such as that of the Parasurāmesvara temple at Bhuvanesvara in Orissa. These Dieng shrines have panels of Brahmā, Siva and Vishnu and were therefore Brahmanical. The first Buddhist temple in Java was Candi Kalasan (778 A.D.) dedicated to Arya Tārā, and close by we find the large storeyed *vihara* structure Candi Sari, and further to the east the beautiful Candi Sewu of the early 9th century. Candi Mendut and Candi Pawon in Kedu with their splendid Buddhist figures were related to and contemporary with Borobudur (about 750 A.D.), the greatest monuments of Java symbolising the glory of Sailendra culture. Coomaraswamy refuses to accept it as a *Stūpa*, and traces its origin to the many terraced pyramidal temples of Kashmir and Gandhara. Borobudur, apart from its architectural grandeur, offers superb sculptural illustrations of the life of the Buddha according to Sanskrit Mahāyāna texts like the *Lalita-vistara, Divyāvadāna, Jātaka-mālā, Karma-vibhanga* and *Ganda-vyūha.*

The greatest Brahmanical monument in central Java is Candi Loro Jonggrang or Prambanan. Three of its shrines are dedicated to Brahmā, Vishnu and Siva, and the plinths are decorated by continuous reliefs of the *Rāmāyana* and the *Krishnāyana* which are superior to the reliefs of Borobudur. From middle Java, the centre of creative activity was shifted to Eastern Java (about 915 A.D.) where we find a different type of art removed from the classical Indian traditions and akin to the mediaeval Javanese art. The great King Erlangga (1010-1042 A.D.) appears in a portrait statue as Vishnu riding upon Garuda. In the 12th century, when King Kāmesvara flourished, Java was the land of chivalry and romance, and the last phase was represented by the art and culture of the Majapahit empire (1294-1478 A.D.). From the Singasari dynasty (1280-1292 A.D.) comes the superb figure of Prajñā Pāramitā now in the Leyden Museum. On Candi Jago, a Buddhist temple, we find illustrations of the *Javanese Krishnāyana* in Wayang like reliefs which became the characteristic feature of the Saiva temple group of Panataran (13th century A.D.) near Blitar. Java was already suffering from Islamic invasion, and there was a general exodus of Hindu Javanese art and culture to the island of Bali, which might have already been colonised directly from India. The architecture and sculpture of Bali resembled very closely the styles of Eastern Java found in the Panataran temples. Inspite of general conversion to Islam and partial conversion to Christianity, the peoples

of Java have retained some of the finest traits of Hindu culture and Bali continues to be predominantly Hindu. Therefore the whole of Indonesia deserves to be studied with the utmost care and thoroughness by Indologists in general and by Indian scholars in particular.*

Monuments apart, the peoples of Java and Bali offer so many excellent and praiseworthy qualities that ony one who visits those lovely islands but once would feel tempted to revisit them. With the imposition of Western economy and government we notice the inevitable changes in the material life of the people; but culturally they remain a part and parcel of Classical Asia and of Epic India. Hence the Balinese rituals and processions have all the simplicity and grace of a bygone age. Hence also the Javanese dance and drama transport us readily to the Heroic age of India with all its tragic contrasts its glamour and pathos. Our Indian universities will benefit immensely by sending research scholars to those not too far away cultural colonies of Indonesia, where they might discover many more links of our common artistic and spiritual life. The living traditions of their arts and crafts, when studied from within, will help undoubtedly to foster the artistic life of India. Promising scholars, boys and girls, from Indonesia, should be given special stipends and other facilities, enabling them to participate in the academic and artistic life of Young India. Dr. Tagore has already shown the way by offering hospitalty to the Javanese students in his school at Santiniketan. It is high time that our big Universities should extend similar courtesies to our cultural kinsmen of Indonesia.

* A splendid beginning has been made by my esteemed friend and colleague Dr. Suniti Kumar Chatterji, of the University of Calcutta, who recently published in book-form his stimulating account of travels in Malaya, Java and Bali in 1927 as the *Dvipamay Bharat* or 'Island India,' in Bengali. (The Book Co., Calcutta, 1940).

CHAPTER XI

CHINA

I

China and the Dawn of Asiatic Culture

CHINA with her vast Mongoloid population is, as we have observed before, the connecting link between the Old and the New World from the very dawn of human culture. The oldest so far traced, ancestress so-called of the American Indians, was the Mongoloid " Minnesota girl " of the late paleolithic epoch. Her age, disputed by many, was only 15,000 B.C., as reported by some American archæologists. We shall open our section on China with the thrilling record of the discovery of one of her remote ancestors aged modestly 500,000 if not 1,000,000 years before the present era. The discovery of the Peking Man is a veritable sensation of twentieth century archæology; and knowing, as we do, that the Peking Man is approximately of the same cultural epoch as the Pithecanthropus of Java, Asia is today holding a veritable world-record in antiquity, claiming two of the most ancient vestiges of the Fossil Man.

Here Archæology comes to shake hands with her elder sisters Geology and Paleontology and in all these branches of science, China and the Mongolian world have made contributions of outstanding historical value. We shall supply here a running narrative of the various lines of discoveries culminating in the detection and identification of one of the earliest types of man known so far. The geological background has been supplied by Dr. Wong Wen-hao, Chief of the National Geological Survey of China. He is the well-known author of several important treatises on mountain-folding in the Pacific region and he prepared an excellent summary of the results of Chinese Geology for the Fourth Biennial Conference of the Institute of Pacific Relations, held in Hangchow (1931). Dr. Wong dates the systematic study of Chinese geology from 1872 when, in the lifetime of Charles Lyell, his " Principles of Geology " was translated into Chinese. It may be interesting to our Indian readers, however, to note in this connection that Dr. John Anderson, Director of the Asiatic Museum of Calcutta, proudly justified the title of that museum by undertaking in 1868-1869, a memorable scientific expedition to China through the upper Irrawaddy and Bhamo. He entered

the South-Western Chinese province of Yunnanfu (north of French Indo-China) where he collected over 150 stone implements testifying to the activities of pre-historic man. These were described by the Italian scholar A. Giglioli of Florence. Later on, jasper and jade axes were discovered in the Fukien and Shansi provinces. So arrow-heads and other tools of Stone Age Culture were recovered from Shantung. Eminent European geologists like Richthofen and Loczy worked in China during the last quarter of the 19th century and they were followed in the early part of the 20th century by Bailey Willis, A. W. Grabau, J. G. Andersson and others. The Imperial University of Peking opened its Geological Department in 1906; and shortly after the foundation of the Republic, the National Geological Survey was established in 1913 with Dr. V. K. Ting as Director. The Survey with its headquarters in Peiping published geological and paleontological memoirs, the latter grouped under the name of *Paleontologia Sinica.* The National Institute of Geology under the Academia Sinica also publishes a Bulletin. In the Republican epoch, the Chinese geologists and archæologists are taking active part in the field of research and their spirit of sacrifice found a tragic expression in the career of a young Chinese scholar Y. Tchao who started from Peking in March, 1929, and, visiting various districts in Western Szechuan, reached Chotung in North Yunnan where he was killed by a group of bandits. Chinese scholars made notable contributions to the science of stratigraphical geology with special reference to the Carboniferous and Permian sections, the latter being the least understood system among all the major geological divisions. The best Permian sections in Asia were known to be in the Salt Range (Punjab) in India and in the Urals. But the Indian geologists betrayed so far an uncertainty in correlating the two. H. C. Tan has made remarkable contributions to the history of Carboniferous Age in China. He also discovered the Cretaceous Dinosaurs of Shantung in 1921 a few months earlier than the discoveries made by the American expedition in Mongolia led by Roy Chapman Andrews. Soon after J. G. Andersson's find of Eocene Gastropods in South Shansi, H. C. Tan discovered (1922) mammals and shells in Shantung. In 1928 Dr. Chi Li discovered Early Tertiary turtles and other fossil fishes and insects in Sichuan on the Honan and Hupeh border. Finally, W. C. Pei also discovered Early Tertiary mammals in the the Ch'anghsingtien gravel not far from Peking. The name of the Chinese geologist W. C. Pei will remain connected throughout history with the discovery of the Peking Man, and we quote below, as a fitting climax, the following words of Dr. Wong in this connection : " The chief interest in Cenozoic geology has recently been centered upon the discovery of

Sinanthropus Pekinensis or the Chinese Ape-man, commonly known as Peking Man. The first trace of this oldest man was found by Zdansky and Bohlin in the form of isolated teeth at Chouk'outien, situated about 75 kilometers southwest of Peking. But it was due to the skill and perseverance of W. C. Pei that several fragments of jaws and two almost complete skulls were found in 1928-29. Both the anatomical study by Davidson Black and the stratigraphical and paleontological study by P. Teilhard de Chardin and C. C. Young resulted in putting the hominid and its associated fauna in the Lower Quaternary, *i.e.*, approximately contemporaneous with the *Pithecanthropus* of Java or, in other words, over 500,000 if not 1,000,000 years before the present era."

From Geology to Archaeology

Workers in the Chinese field have demonstrated admirably how Geology helps the cause of Archæology. From the study of Fossil Fauna and Fossil Flora, the natural transition is to the search of the Fossil Man. Step by step the geologists and paleontologists have led to the discovery of the earliest human remains in China, suggesting thereby the possibility of similar discoveries in Indonesia, where the Java Man had already been discovered as early as 1890, and in India, where the Yale University expedition is getting good results. To continue the narrative of the important Chinese discoveries, we note that from 1916, the National University of Peking reorganized its Departments of Geology whence over 100 students have been sent out for field-work. Already in 1918, a distinguished Swedish geologist, J. G. Andersson entered China as Mining Advisor to the Chinese Government. He left a brilliant record of discoveries and of collaboration with the rising generation of Chinese scholars. In 1921, he discovered the neolithic dwelling sites at Yang Shao, the Eocene mammals on the Yellow River, the Sha Kuo T'un cave deposit in Fengtien province (Manchuria) and the still more remarkable discovery at Chouk'outien cave, the home of the world famous Peking Man. In 1922, he explored Shantung with H. C. Tan. In 1923-24, he linked the Honan finds with those of Kansu and Kukunor on the confines of the Gobi Desert. Thanks to the enthusiasm in archæology of His Royal Highness the Crown Prince of Sweden, the Swedish Government founded the Museum of Far Eastern Antiquities in Stockholm in 1926. A friendly arrangement was made between the Swedish museum and the National Geological Survey of China under its two Directors Dr. V. K. Ting and Dr. Wang Wen-hao. Other Swedish scholars like T. J. Arne and Nils Palmgren

also entered into a line of collaboration strengthened by the late Dr. Davidson Black and Dr. F. Weidenreich of the Peking Union Medical College, who identified and scientifically described the Peking Man. The quest of the earliest man in China thus gradually assumed an international character. Dr. Andersson collaborated from 1921 with a brilliant Austrian paleontologist Dr. Otto Zdansky (now Professor at the University of Cairo) who with extraordinary skill helped Andersson in the excavation and treatment of most important vertebrate fossils. In 1921 also there arrived in Peking Dr. Walter Granger from the American Museum of Natural History to act as the chief paleontologist to Dr. Roy Chapman Andrew's big expedition to Mongolia. A very remarkable event in the study of Asiatic pre-history was the first scientific symposium held in the auditorium of the Medical High School in Peking in honour of the visit of the Crown Prince of Sweden (October, 1926). Dr. Wang, the President of the Geological Society, welcomed the royal guest, and the Crown Prince courteously recalled the hoary traditions of archæological research in China. The renowned political leader and scholar Liang Chi Chao (who was the President of our *Visva-Bharati Mission* Reception Committee in 1924) delivered a learned address on Chinese antiquities. The French contribution came through Prof. Teilhard de Chardin who described Father Licent's and his discovery of the Early Stone Age Man in the Ordos Desert. Prof. Wiman's account of the Dinosaur Hilopus was read. But the most sensational communication was from Zdansky saying that working on the Chouk'outien material, he had found a molar and a pre-molar teeth of a creature resembling a human being. Dr. Grabau named this hominid the *Peking Man*, and a systematic study of the same was organised by the Geological Survey of China in co-operation with the Peking Union Medical College and the Rockefeller Foundation. The official direction was entrusted to the geologist, C. Li, who was responsible for the geological and topographical observations, while Dr. Davidson Black of the Medical College was requested to make anatomical studies. The excavation at the cave began in April 1927, but war broke out between Chang Tso Lin and Yen Hsi Shan, and the archæologists worked while the thunder of the guns was heard from the caves. Dr. Black examined several pre-historic teeth and placed beyond all doubts the hominid character of this new genus *Sinanthropus* with the species name of *Pekinensis*. In 1928 Mr. Li who was collaborating with Dr. Bohlin (discoverer of an important tooth) was assisted by Dr. C. C. Young and W. C. Pei in the excavation of the cave, and they brought back to Peking the richest harvest of pre-historic materials from the bone-bearing deposit of the cave. Up to 1929 they worked for 64 weeks bringing 1485 cases of their collections.

Mr. W. C. Pei who conducted operations at the cave in the autumn of 1929, discovered the most complete Sinanthropus skull. He published in the *Bulletin of the Geological Society of China* (Vol. VIII, No. 3), his " Account of the discovery of an adult Sinanthropus in the Chouk'ou tien." On this epoch-making discovery Dr. Black published an illustrated monograph. " An Adolescent Skull of Sinanthropus Pekinensis " (*Palæontologia Sinica*, Vol. VII, 1931). Mr. Pei also published in the *Bulletin of the Geological Society of China* (Vol. XI, 1931), his " Notice of the discovery of quartz and other stone artifacts in the Lower Pleistocene Hominid-bearing sediments of the Chouk'ou tien deposit." In his thesis Pei was fully supported by Abbé Breuil of Paris, a leading expert on the stone technique of the Paleolithic Age. The French scholar also observed that some of the horn and bone objects showed traces of having been used as implements. After his visit and personal examination of the finds in 1931, Prof. Breuil pointed also to charred wood and burnt bones, proving that the Peking Man had also turned fire to his use. The two brilliant Chinese scholars, C. C. Young and W. C. Pei directed the excavation in 1930-31, making some of the most important anthropological discoveries. The *Bulletin of the Geological Society of China* (Vol. XI, 1932), published two more valuable papers : one by Pei and Teilhard "The Lithic Industry of the Sinanthropus Deposit" and the other by Black on the " The Skeletal Remains of Sinanthropus other than Skull Parts." Thus the Chouk'outien Deposits came to give us the new theory of the early history of man and his use of *rice*. Eminent scientists like Elliot Smith discussed " The Significances of the Peking Man " (Edinburgh, 1931). So Sir Arthur Keith, in his " New Discoveries relating to the Antiquity of Man," devoted three chapters to the Peking Man. They substantially agreed with Black, who, after exhaustive comparison between the skulls from Java and from Peking, came to the following conclusion : " Whereas Pithecanthropus is a highly specialised, not to say in certain respects degenerate type, Sinanthropus is a remarkable combination of highly original and purely modern features." Black sums up its characteristics by saying that Sinanthropus is a generalised and progressive type, closely related to the original type of *hominidæ* which was the proto-type not only of the Neanderthal man and the South African fossil human races, but also of the modern *Homo Sapiens*. The Neanderthal race is now admitted to have introduced to Western Europe the Middle Paleolithic or Mousterian culture from Central Europe, which again is now seen to have cultural relations with Central Asia of the pre-historic epoch. This relation is continued down to the Neolithic Ages when Europe got her first batch of domesticated

sheep, pigs and other tame cattle types from Central Asia, the horse appearing much later.

Recently two more cultural deposits have been discovered and described as belonging to " the Old Paleolithic type showing some external Mousterian analogies." In 1933 Mr. Pei discovered also late paleolithic remains : bone tools, and ornaments, along with human skeletons. The flint objects are few, but the variety and richness of the ornaments are remarkable : bone-needles, shells, teeth-ornaments, perforated stone pebbles, among others, appear to show that these were equivalent to the cultural relics of the Magdalenean Man of Europe. The French scholars Tielhard and Licent already discovered in 1929, in North Manchuria, Late Paleolithic remains like incised antlers with holes for handles, incised bison's ribs, pebble hammers, etc., in the Djali-nor culture zone, and also in Shantung and Sinking provinces. In 1935, Dr. Wong sent W. C. Pei, C. C. Young and Teilhard to the Kwangsi province where they discovered a culture allied to the Bacsonian remains of Indo-China. It might have been called Neolithic but for the absence of pottery. Here the tools are both incised and coloured, and thus may belong to the Mesolithic Culture. Dr. Li Chi and Dr. S. Y. Liang from the Institute of Philology and History of the *Academia Sinica* discovered two pre-historic culture areas in Jehol and the three Eastern provinces. There they found chipped stone as well as polished stone tools. They recently argued to prove the existence of " a trans-Gobi culture," while describing the neolithic sites in Jehol and Shansi. Possibly in those remote ages, there prevailed a great Siberio-Mongolian culture uniting Ordos, Siberia and Central Europe; for the Ordos culture relics appear to resemble those found in Krasnoiark in Siberia and also in Vestonice in Czechoslovakia described by Prof. Karl Absolon. Thus the Aurignacian industry of Central Europe seems to be linked with the pre-historic culture of Northern Asia, the homeland of the Eskimoids, Mongols, Tartars and so many other nomadic races of the later historic age. The Odros culture in China seems to be an isolated one, possibly coming from Central Asia, sometimes the Promised Land for anthropologists.

Thus China, while connecting on the one hand Asia with America, links pre-historic Orient with pre-historic Europe on the other. By a series of happy coincidences, the discoveries in the Chinese field have helped us in understanding as well as classifying the successive phases of human civilisation with approximate dates : (1) The Sinanthropus Culture of *circa* 500,000 to 100,000 B.C. (2) Ordos Culture 100,000 to 75,000 B.C. (3) The Upper Cave Culture 50,000 to 25,000 B.C., (these rough datings must

be revised according to the latest studies of Dr. F. Weidenreich : *Bul. Geol. Society of China*, 1935-1939). (4) The proto-neolithic Djali-nor culture, 25,000 B.C., coeval with the *Homo Sapiens*, our direct ancestor, and the Aurignacian and Magdalenean Culture. (5) The neolithic Yang-Shao Culture of a people who are characterised by Dr. Black as " Proto-Chinese " and whose cultural activities may extend from 10,000 to 2,000 B.C. Mr. Lin Yao in his report of recent excavations in Honan describes another layer of painted pottery, perforated stones, etc., which may be an extension of the Yang Shao culture. A degenerate aftermath of the same has been discovered in Shensi province by Mr. Hsu Ping-Chang of the Academia Peipinica. (6) Last, though not the least, was the transitional phase from proto-historic to historic culture of China as unearthed by Dr. Chi Li and S. Y. Liang. They exavated at Houkang and Anyang with the financial support from the Freer Gallery of Washington. Digging from the Neolithic and other pre-historic sites to the Bronze Age, they clarified with the light of archæology the history of the Shang culture (1766-1154 B.C.) and of the dawn of the Classical Chinese Civilisation. The recent publication, *The Birth of China*, of Dr. H. G. Creel of the Field Museum of Chicago, shows what a great progress has been made in the decipherment of the " Oracle Bone " inscriptions which are now found organically connected with the Chinese ideograms of the later historical periods since the Chou dynasty (1154-259 B.C.). This is an achievement as important as it would be if we could connect the Indus Valley script with the Brāhmī script of later historical times in Hindu India.

Thus the pre-historic and the historic periods of China stand interrelated and mutually illuminating, and many of the so-called " legendary kings " of pre-Chou dynasties may now appear to symbolize some of the earlier achievements in the culture history of China. The legendary or *Puranic* elements, to speak in the Indian way, in Chinese literature have recently been utilized from this point of view by Mr. P. C. Kuo, who published a significant monograph on the *Folkways in Pre-historic China*, based on excerpts from the ancient text *Shih Pen* now completely lost to us. The production of fire is credited to the earliest known King Sui-Jen. So the reign of King Fu-Hsi (2852-2738 B.C.) is reported to have witnessed the discovery of hunting, fishing, animal husbandry, growth of the clans, the marriage system, music of the lute, and the eight trigrams and the calender; that of King Shin-nung (2737-2705 B.C.) saw the plough, the use of medicinal plants, markets for exchange of commodities, and stringed instruments. King Huang-Ti (2704-2595 B.C.) discovered musical notes, the reed organ, bells, writing, arithmetic, cyclical characters, official costumes to distinguish political and

social ranks, upper and lower garments, hats with tassels, astrology, astronomical instruments, the compass, boats and oars, carriages, silk-rearing, pottery, mortar and pestle, bow and arrow, spear, sword and shield, medicine and medical texts. King Yao (2357-2258 B.C.) fixed the calendar by intercalary months, enriched the music by introducing drums, and introduced wells for irrigation. King Shun (2258-2206) introduced the improved plough, weights and measures, flutes and bells, and five types of corporal punishments : branding, cutting the nose, amputation of feet, castration and death.

Thus from these kingly pioneers of Chinese civilisation we naturally and easily glide down to the comparatively well-known achievements of the Hsia dynasty (2205-1766 B.C.) with their palaces, city-walls and other paraphernalia of sovereignty, their laws of atonement, their rich conveyances, sweet wines and elaborate ritualism which naturally led to the glory and grandeur of the Shang (1766-1154 B.C.) and the Chou Dynasties (1154-259 B.C.). The exquisite Shang and Chou bronze vessels and ritual articles are now well-known objects of art and archæology, and the museums of Europe and America have been vying with one another to collect them. The Chou period towards its middle witnessed the appearance of Lao-tze, the mystic philosopher, and Confucius, the statesman-moralist, with whom we open the chapters of Classical China rich in literature and philosophy.

Thus the great tradition and literature of ancient China, mostly belonging to the second and the first millennia B.C. are just beginning to assume a tremendous historical significance, thanks to the recent archæological explorations. The rising generation of Chinese antiquarians are thoroughly convinced of the great possibilities of archæological excavations. Privileged to be in touch with a leading exponent of this new archæological school, Dr. Chi Li, whom I met in course of my first visit to China in 1924, I shall give a brief account of his splendid work of excavation at Anyang in Northern Honan. This was the capital of the small kingdom which, towards the end of the Shang dynasty (1766-1154 B.C.), was the cradle of the Chou power which, a thousand years later, was to be replaced by the great empire of the Han dynasty. In Anyang was discovered the roots of the historic Chinese civilization with its specific characteristics of a literary language, religion, statesmanship, and an archaic art of exquisite carvings in bone, stone and ivory as well as of bronze tools and ritualistic vessels covering a period roughly from 1500 to 1000 B.C. The Institute of History and Philology, organised in 1928 by the *Academia Sinica*, was the first to sponsor archæological excavations. It entrusted the work to Dr. Chi Li who through

his academic contacts with the learned societies of U. S. A. roused the interest of the Freer Gallery of Art, Smithsonian Institution, which shared equally with the Institute the expenses of the Anyang excavations. Hsiao-t'un Ts'un, where the diggings were carried out, was once part of the capital city of the Shang dynasty between 1500-1200 B.C. But it was deserted before the final collapse of the dynasty owing to recurring floods. The site came to be known to antiquarians in 1899 when some curio dealers brought some inscribed bones to Peking. These proved to be veritable " bones of contention " at the outset; for Chang Pin-lin, one of the greatest living Chinese scholars, declared them as forgeries, while curio dealers were making money in that period of " bone-rushes." However, studies made by serious scholars like Lo Chen-yu and Wang Kou-wei laid the foundation of a new branch of Chinese palæography. Out of 1,600 archaic Chinese characters found on these bones, about one-half were definitely deciphered, throwing a flood of light on the political, social, economic and religious history of the nation.

These " Oracle Bones " proved beyond doubt that oracles regulated even the minute details of kingly duties : performing a sacrifice, sending an expedition, hunting, fishing and so forth. Inscribed plastrons and scapula, used for the purpose of divination, have been discovered with archaic characters which are more primitive than the oldest inscriptions on bronze. Invaluable as these oracle bones are in the domain of Chinese palæography, the associated finds in the same strata are no less important because they often substantiate and even supplement the verbal statements on the bones. For example, the large collection of bronze weapons, ceremonial vessels and ornaments as well as the remains of bronze ore, slags and moulds proved beyond doubt that there was an extensive bronze industry and that the Shang people had mastered, to a very advanced degree, the art of bronze casting—a fact which could not be read in any of the inscribed bones. Then again, the copper and tin supply being limited, many objects like axes, knives and utensils were still made of bronze and stone, simultaneously, just as we find in the so-called " chalcolithic " culture of the Indus Valley. The more ancient Aeneolithic Culture of Yang Shao developed a marvellously decorative polychrome pottery with painted designs. Crude survivals of degenerate Yang Shao wares (like the Sind pottery after the Mohen-jo-Daro and Harappa ceramics) were discovered in Anyang, where, however, the specific type of ceramics is monochrome and decorated by incised lines. The most startling discovery is the use of a *glaze* (hitherto considered as starting with the Han dynasty) in Anyang pottery types, which in spite of their aggrega-

tive character (as is to be expected of a metropolitan culture) conform to a certain common regional traits. In the associated finds also occur many decorative works of shell, bone and stone, which go to prove that the arts of that period were more luxurious than what the oral or the recorded tradition would warrant us to expect. So in every sense archæological excavations in key-sites like Anyang tend to revolutionize our stereotyped ideas about the origin and development of Chinese civilisation.

Early Chinese Culture—A Comparative Estimate

The value of pre-historic studies can rarely be better demonstrated, as we have seen before, than in the marvellous unfolding of a hitherto unsuspected Chinese culture from the historic Anyang epoch, through the proto-historic Yang Shao strata, to the faint glimmer of the pre-historic dawn in the Chouk'ou tien Caves. The Chinese people were complacently accepted or condemned as an *isolated* people because philologists lebelled their language as "isolating." Objective study of archæology comes to brush aside heaps of these cobwebs of fixed ideas and enables us to see China (in the words of my esteemed friend Dr. Chi Li) "not as an isolated unit by itself, but as a fragment of the total humanity." The discovery of the Peking Man has forced the students of pre-history, as we have shown above, to correlate the Chinese data with those relating to the discoveries of fossil human remains in Java (Trinil Skull), in Australia (Victoria Skull), in Africa (Rhodesia Skull) and in Europe. Innumerable books and monographs now coming from scholars from different parts of the world show beyond doubt how they are eager now not to segregate but to correlate the finds from different zones or islets of positive knowledge in the ocean of oblivion.

Such a synthetic presentation of Chinese history has been attempted by Dr. J. G. Andersson in his *Children of the Yellow Earth*. I wish to draw the attention of my readers to his brilliant exposition of the "Early Chinese Culture" (*Geological Survey of China*, October, 1923) on a comparative basis. While characterising the Yang Shao culture as "Proto-Chinese," Dr. Andersson detected a special type of pottery which seemed to point to cultural relations of China with the Western World, to Russian Turkestan and possibly even to Europe of the late Stone age. This pottery, found even in the deepest part of the culture stratum is polished and polychrome, although, unfortunately, preserved in fragments only. They are mostly bowls, finer than the rest, thin and gracefully worked, with a polished surface, and covered with black (and occasionally white) pointings in many patterns. Similar types have been found in the late neolithic and aeneolithic

cultures of Europe, in Sicily in Northern Greece (Chæronea ware), in Galicia and Tripolji (near Kief in South West Russia). The Pumpelly expedition (1904) from Anau (near Askabad in Russian Turkestan) also discovered such polychrome polished pottery. A comparison of all these types revealed striking likeness in certain designs, which might be explained away as cases of parallel development, but the Honan and the Anau types are so strikingly similar that we may be justified in admitting the possibility of a migration of art designs. The distance from Honan to Anau is very great, but the two cultural zones are connected by a highway of migrations which extends between the Tibetan highlands in the South and the Siberian Taiga in the North. These vast expanses of steppes and deserts form a continuous belt from the Pacific to the Black Sea and probably enjoyed in ancient days a climate more genial than at present. Many of the inland seas and lakes have dried up, forcing the migration of men and animals from East to West, as we know that neolithic Europe received many of its edible plants and animals from Asia—possibly along this cultural highway of Central Asia. The Asiatic ostrich moved from Shantung to the steppes North of the Black Sea in the Old Stone Age. The sheep, the pig, the goat and the humped-bull, and, later on, the horse are also reported to have entered Europe from the East. During the transition from the neolithic to the aeneolithic ages, the Honon pottery types also might have migrated to Aanu, Tripolji and Sicily. Strange stone effigies found in Inner Mongolia occur also all over the desert belt of Asia up to the shore of the Caspian. These were connected with a proto-Turanian people, and in the historic period we know that art ideas were copiously exchanged between the Chinese on the one side and the Scythian and the Turanian peoples on the other. Mr. R. L. Hobson, the British Museum expert on Chinese ceramics, made a significant statement with regard to the polychrome pottery of Yang Shao. The red potteries with black ornaments were equated by him with the Babylonian pottery of the pre-Sumerian strata (before 3500 B.C.). Similar types, according to Hobson, prevailed on the Eastern borders of Persia (now definitely linked with our Indus Valley finds), also in certain parts of Asia Minor and Thessaly from the 3rd millennum B.C. R. C. Thompson while reporting (*Archeologia*, Vol. XX, 1920) on the British Museum Excavations at Abu Shahrain or Eridu (Mesopotamia) observed that Eridu was occupied by a pre-historic Armenoid people, before the Sumerians (3000 B.C.), whose culture resembled those found by De Morgan at Susa and Mussian. Thus they formed a link with the early migrations from Anau, whence pottery motives spread as far as Anatolia and South Palestine.

The absence of metal work with the Chinese finds seems to point to very early date, for we know that bronze was very widely used in China in the Hsia epoch (2205-1766 B.C.). The use of the wheel for some of the pottery is very interesting but not unexpected according to the traditions of the Shang Dynasty (1766-1154). Dr. Hubert Schmidt of the Folk Museum of Berlin who directed the excavations in Anau and described the archæological materials in the report of the Pumpelly expedition was rather sceptical. But he admitted the possibility of such a cultural exchange across Asia, and encouraged Dr. Andersson to continue that line of investigation. Even as a working hypothesis, Dr. Andersson's theory raises issues of far-reaching consequences. The ill-fated theory of Western (*i.e.*, Chaldean) influences on the early Chinese civilisation started long ago by Terrien de Lacouperie appears to assume a new significance, and we know that early Chinese chronicles point to repeated migrations from the West of barbarian tribes gradually assimilated by the Chinese races. The Yang Shao clay tripods resemble closely the bronze tripods of the early dynasties. This fact, together with the evidence of the potter's wheel, appears to point to the third millennium B.C. as the lower limit of Yang Shao culture, which, therefore, is chronologically on the same scale as the Indus Valley civilisation. The eminent anthropologist Dr. Ales Hrdlicka of the Smithsonsian Institution made the scholarly world think in a new line when he remarked that "the Chinese remain essentially a Yellow Brown people; but there are indications that they also carry a more or less considerable old admixtures of white blood of unknown derivations, together with a little of more modern mixture." Thus the archæologists, with the co operation of anthropologists and philologists, would solve these tantalising problems, let us hope, in the near future.

NOTE :—The importance of *Sinanthropus Pekinensis* and the relation of the Peking Man with other fossil human types have been discussed fully by Dr. F. Weidenreich : (Vide *Bulletin of the Geological Society of China*, Vol. XIX, No. 1, Peiping, 1939). He observed that the Sinanthropus knew the art of hunting (animals and human beings), the use of fire and was skilled in the manufacturing of tools and their uses (p. 16). He accepts "four centres of origination" : (1) in Asia Minor with reference to the European races, (2) in East or South Africa with relations to Negroes, (3) in North China with relations to Northern Mongols and (4) in the Sunda Islands with relations to Australians and Melanesians (p. 73).

South China has recently started yielding ancient cultural relics first noticed in the Proceedings of the Congress of Pre-historians, Singapore, (1940) : "Some Aspects of South China Archæological Finds" by the Rev. Fr. R. Maglioni (pp. 209-230) ; and "A proto-historic site at Shek Pek, Lantan, Hongkong" by Mr. W. Schofield (pp. 235-313). Maglioni believes South China to be the seat of the oldest anthropological types and languages. He further opines that a Western Sumerian-Sowian culture reached China by the Southern route : India, Burma, Tonking, Canton, Hongkong, Hoifung.

II

Problems of Chinese Art and Archaeology

THE study of Chinese art and antiquities is important not only in the history of the Asiatic nations but in the general history of the evolution of human culture. For several decades Egypt supplied the only scale of computation, as it were, to antiquarians, so much so that some went to the absurd length of asserting that almost every important discovery by mankind could be traced to Egyptian influence or Heliolithic culture. But the Egyptian monopoly came soon to be contested by a dangerous rival from the Near East, Mesopotamia. Her pre-Semitic Sumerian and pre-Sumerian cultures and the wonderful finds of Ur amongst others, have drawn the Nilotic culture on the one hand and the Indus Valley culture on the other into a line of undreamt of historical contact and collaboration. The wonderful painted pottery traditions of these Western nations appear to have penetrated China, as evidenced by the brilliant Aeneolithic pottery series of Yang Shao in the Honan province. The remains of Aeneolithic Man are found all over China, and Mr. Stuart Lillico presented to the Shanghai Museum the potteries and skeletal remains discovered by him in Shansi. Dr. J. H. Edgar also presented to the Museum some valuable stone implements from the Yangtze river basin and from Western Szechuan which probably belong to the early neolithic or even paleolithic age. Thus we see that from the very remote age of the Peking Man down to the Neolithic, the Aeneolithic and the Bronze Ages, China had been continuously occupied by successive generations of Man. The original area of development of the historic Chinese race included the provinces of Shensi, Honan and Shantung irrigated by the Yellow River. But anthropologists are daily drawing our attention to the highly interesting *aborigines* like the Lolos of Szechuan, and Yunnan, the Miao-tzes of Kueichou, the San-tak of Fukien and the so-called head-hunters of Formosa and Hainan. The interaction of this aboriginal South-eastern culture with the Northern Chinese is a subject of future investigation. So, as against the theory of the Western migrations, we are confronted with an Eastern theory of an independent cultural evolution in Manchuria, Korea and Japan, thanks to the researches of Japanese archæologists. Thus the theory of the "Chinese Wall" is collapsing, and some day we may be surprised by the discovery of Pacific Cultural intrusions into China as we guess from the collection of the Hoang-Ho Pai-Ho Museum in Tientsin.

Importance of the Anyang Culture

In 1905 Rev. Frank H. Chalfaut and Mr. Samuel Couling secured from some Chinese dealers bone and tortoise shell fragments bearing pictographic inscriptions. Some of them were deposited in the Shanghai Museum which received also sacrificial knives and other antiquities of the Shang dynasty (1766-1154 B.C.) from Mr. H. E. Gibson. Prof. James M. Menzies, a Canadian sinologist, working at the Chellow University, Shantung, also made a most valuable contribution to the study of Shang culture by his archæological collections and his profound study of the pictographs on the " Oracle Bones." Lastly, Dr. Li Chi and his colleague of the *Academia Sinica* discovered and published volumes of reports on the priceless relics on Shang culture which is now definitely known to be the bed-rock of the Classical Chinese Culture starting with the Chou dynasty (1154-259 B.C.). The fascinating history of this early and coherent Chinese civilisation of second millennium B.C. has been brilliantly described by Dr. H. G. Creel of the University of Chicago in his *The Birth of China* (Jonathan Cape, London, 1936). Basing on his valuable study we give below a general summary of results regarding Shang civilization.

The Shang people who lived at Anyang in the 14th century B.C., offers, through their historical relics, evidences of their contact with the Western Asiatic as well as the Far Eastern Pacific culture. But the resultant civilisation of the Shang people is supposed by some scholars to be that of an invading aristocracy from the West introducing a rare type of bronze technique. They may have had no connection with their predecessors of the Neolithic Age, famous for their painted potteries. Mr. Liang Ssu-Yung, a ceramic expert, is definite about the fact that the Shang pottery technique is a continuation of that of the black pottery culture of an earlier epoch. Excavations have revealed several types of civilisation of the Shang people in the neighbourhood of their capital city and that they were building defensive walls which were a standard feature of Chinese culture in the Chou period. Although the Shang people were past masters in bronze casting, yet we find them using simultaneously stone utensils of the Aeneolithic type, just as we find in the Indus Valley Culture. Bronze being scarce was reserved for making weapons and ceremonial vessels. A large number of rectangular or semi-circular stone knives have been found at Anyang which are not to be found in the Near East or in Europe. But they have been discovered in North-Eastern Asia, in the land of the American Eskimos, and even in South America. This, according to Dr. Creel, is " another of the links which bind

the Shangs and Chinese culture to an ancient Pacific culture area." The Shang artisans carved ornaments from jade and other beautiful stones, and also left many figures of animals, birds and men. But they excelled in handling bone and shell materials, often covered with finely carved designs like those found on bronzes. The painted pottery of the Late Neolithic Period had vanished completely, giving place to the cruder-Shang pottery, probably coming from the East, in marked contrast with the fine Western type of Yang Shao culture. The Shang pottery was baked in kilns and some show definite trace of a *glazed* surface, and it is significant that almost all the forms that we find in Shang and later Chinese bronze vessels are found also in the Anyang pottery.

We must always remember, however, that in the history of arts and crafts, as recovered from ancient ruins like the Shang tombs, some of the finest specimens in perishable materials are often lost beyond recognition. Dress-pieces, embroidery, textile designs and such things are lost for ever. Yet the chance discovery of mother-of-pearl buttons oblige us to admit that the Shang people even in those remote days were highly fashionable in their sartorial make-up. We did not know whether they had music or songs till a small object carved from bone was excavated from a Shang tomb in 1935, which turned out to be a musical instrument. It was identified by Mr. Liang Ssu-Yung with the *Hsuan*, sometimes called a Chinese ocarina. So by sheer good luck wall-paintings have been discovered in course of excavations of the tombs in 1934-35. Larger pieces of paintings that have been discovered intact show bright red, black and white colours. The motifs used in the paintings bear strong resemblance to those on the Shang bronzes. If more of such pictorial documents come out, the early history of the Chinese paintings will have to be rewritten.

There is no doubt that the Shang were the real pioneers in many branches of minor arts which we supposed to have originated with the later Chou people, who, like the Romans conquering the Grecks, were culturally conquered. In the making of ornaments, utensils and in the carving of jade and precious stones as well as in fashioning the shells, the horns of cattle, the antlers of deer, the tusks of the boar and the elephant, the Shang artisans were real experts. Even a profound sinologist like the late Dr. Berthold Laufer of the Field Museum of Chicago rarely ventured to go beyond the Chou period (1154-259 B.C.) in his splendid monographs on "Jade" (1912) and "Ivory in China" (1925). He was, however, one of the first to trace the continuity of the *elephant* symbol in the inscriptions on the archaic bronze vessels of the Shang and Chou dynasties. He also

demonstrated that the existence of the elephant on Chinese soil could be proved conclusively by linguistic, pictographic, historical and archæological evidences. With the exception of their cousins, the Tibetans, who called the animal " the bull of Nepal " (which they discovered through late contacts with Nepal), the Burmese, the Siamese, the Shan, the Ahom, the Mo-so and the Angami Naga dialects derive the name of the elephant from its ancient Chinese designation.

Only a few years ago, scholars supposed that there were no Chinese sculptures before the Han period (206 B.C.—220 A.D.). Their theory was completely upset by the discovery of a fragment of a sculptured human figure, just as the discovery of the Mohen-jo-Daro and Harappa statutes revolutionised the theory of the origin of Indian sculpture propounded by many European scholars. The designs in the Shang sculpture are repeated in the bronzes of the same epoch, and probably both the stone carvers and the bronze casters were indebted to the expert wood-carvers whose works could not withstand the ravages of time. A few pieces of wood-carving, however, have been miraculously saved and were recently discovered on the walls of the tombs with their beautiful and intricate patterns, rarely naturalistic, tending to the grotesque, yet perfect in the technique of execution. Like the gorgeous painted potteries of the Yang Shao Culture which were lost to the Shang people, the splendid sculpture of the latter vanished with the Shang regime and re-emerged after centuries in the sculpture of the Han epoch. A most interesting specimen to students of Indian sculpture is the discovery of the so-called *Tao-Tieh* or " Ogre Mask " which is the nearest approach to the Indian *Kīrti-mukha.* Both have undoubted architectural significance *

But the noblest contributions of the Shang people to the art world were their incomparable Bronzes. They were cast by the well-known *cire perdue* process, and the National Research Institute at Anyang have discovered plenty of evidences to show that the smelting of bronze was practised there. The ores were imported from outside, and some kind of blast furnace was probably employed. Even under such limitations, the Shang artisans could produce such superb specimens that " while a very few of the best leading craftsmen in Europe or America, aided by all the resources of modern

* In tracing its origin, Rostovtzeff remarked, " it has the form of an animal mask, consisting of a pair of eyes, a pair of ears, two horns and a crest. I have not the slightest doubt that what is meant is a horned lion-griffon, the most popular animal in the Persian art."—(*The Animal Style in South Russia and China,* 1929.)

science and technology may be able to equal the casting of Shang bronze workers, they can do no better."

A very different problem confronts us when we think of linking this remarkable bronze industry of China with the bronze casting in other parts of the world. The immediate predecessors of the Shang people were the makers of the black pottery culture at Anyang, yet not a trace of bronze has been found there. It seems to be a finished industry without a previous history, and it has led some to theorize that it was introduced by the " invaders of the West." The painted pottery of the earlier epoch was apparently an intrusion from the West, arriving first and lingering longest in Kansu. But so far no big bronzes have come from outside and it was perfectly naturalised in China by the Shang people, who used the patterns and designs which are rarely known outside China.

Some scholars have detected resemblances between this art and designs discovered in the Pacific islands and among the Aztecs and Mayas and the North-West Coast Indians. They all resemble in their use of isolated eyes as decorations. Many other affinities between the Pacific and the Shang civilisation may gradually be discovered.

Thus the discoveries at the " Great City Shang " eulogised in the " Book of Poetry " of the Chou epoch, furnish us with invaluable links connecting pre-historic China with the historic Chou culture. Like the Aryans of India following with a cruder material culture in the wake of the people of the Indus Valley civilisation, the Chous entered the historic period. forming alliance with a group of the Western barbarians, who were often hunted down, enslaved or sacrificed like cattle by the Shang people. These barbarians under the leadership of the Chous crushed the Shang power in 1122 B.C. No doubt the Chous assimilated a good deal of the culture of the Shang but they " were products of two distinct lines of cultural evolution with long separate histories." As long as a single brother of the Shang King were alive, his son could not inherit. But in the Chou regime the throne normally passed to the eldest son of the principal wife of the King. The Chou period is rich in literary as well as artistic monuments, but it was by sheer good luck that archæological finds recently came to supplement our information. In 1932-33, eighty-six tombs were excavated in Hsun Hsien in Honan, a few miles to the north of the place reported to be the first capital of the Chous. The tombs were excavated by the National Research Institute and the Honan Archæological Research Association. Like the Shang tombs at Anyang they had been filled up with pounded earth, and yet all but two of the tombs had been robbed. Grave-robbers of China are professional

rivals of archæologists, and that is how some of the most valuable specimens of Chinese art and archæology are found, alas, in the public and private collection of Europe and America. The tombs apparently belonged to some nobles and their consorts, and as Mr. Kuo, the Director of the excavation observed, valuable objects were buried with the dead in a fixed order : chariots were buried in the south, armour in the east, weapons on the west and ritual vessels on the north. Many of the vessals were inscribed, serving as valuable epigraphic documents, helping to fix the dates of the objects. One branch of the house of Chou, the Wei rulers, appear to show a strong Shang influence, and some of their bronze vessels might have passed as Shang productions. But while the motives were identical, the execution was very different. The subtle compound curves in Shang designs and its delicate traceries appear cruder and heavier in the Chou patterns. In some bronzes the Chou artisans showed great boldness and strength, but they could not continue successfully the great Shang tradition which apparently died with the crushing of their spirit. The arts of designs degenerated rapidly in the Chou period. But while the Chous were relatively a cruder people, they had greater vitality; and following the river Wei, they progressed east-ward to the Yellow River and to civilisation. They left a full and rich literature as against the fragmentary oracle bones of the Shang people.

While the art products of the Chou people, specially their bronzes, were cruder, yet they supply, as compared with the fragmentary bone inscriptions of the Shang, a most valuable collection of bronze inscriptions depicting various aspects of the life in the Western Chou period. Thus a bell was made to preserve the bell-maker's genealogy, and a code of criminal law was cast on a set of bronze vessels in early days. When in the later Eastern Chou period the inscriptions became shorter, they were amplified by the rich harvest of contemporary literature : *I Ching* or Book of Changes, a diviner's manual to foretell the future, the *Shih Ching* or Book of Poetry displaying both emotion and imagination, the *I Li* or Book of Etiquette and Ceremony, the *Kuo yu* or Discourses of the States and *Shang Shu* or the Classic Document which was written just after the conquest of the Shang. Their downfall was attributed to their inability to read history or to keep pace with time. That is why probably the Chou conquerors sedulously applied themselves to the study of history and to develop, as early as 1000 B.C., a profound regard for and a sense of the value of history.

Before passing on to a rapid survey of the monuments of the well-known historic dynasties of China, we should remember with gratitude the splendid services rendered by scientific explorers to the reconstruction

of the vast historical background of the Chou and Shang cultures flourishing mainly in the second millennium B.C. If we are permitted to characterise Indian civilisation of the same epoch by the traditional designations of the Vedic and the Epic cultures, these appear to be contemporaneous with the Shang and the Chou cultures. The parallelism is pushed further by a specialist like Dr. Creel who while discussing " The Gods of Shang " could not help comparing the early Chinese ritualism and its paraphernalia with the doctrine and symbolism of the Vedic and the post-Vedic sacrifices (Vide *The Birth of China*, pp. 182-83). His equation of *Shang-Ti* and *Brahman* is significant from the point of view of parallel psychological evolution, even if positive historical contact may be out of the question.

Going beyond the second millennium B.C. we find again China and India happily developing most valuable and hitherto unsuspected monument of art and archæology, reaching to the fourth millennium B.C. In India, we have discovered the Indus Valley civilisation with its bewildering variety and richness of cultural remains belonging to the pre-Aryan and the pre-Vedic strata of Indian culture. We have also discovered well developed scripts on seals which have been compared with the Babylonian ones. But unfortunately we have so far not discovered any of their later or intermediate phases connecting these early scripts with the known Brāhmī and Kharostrī or Kharosthi of the historic period. Here China is more fortunate than India in possessing her treasures of Oracle Bone Inscriptions directly leading to the well-known Chinese pictographs. However, the Aeneolithic pottery series of India as well as of China must necessarily be studied now on parallel lines, as has been suggested by the brilliant researches of Dr. Andersson, Dr. Arne and other Swedish sinologists. The painted pottery of Yang Shao is generally admitted to be an intrusion from the West and the painted pottery finds from Sindh and Beluchistan also betray Western Asiatic affinities supported by historic relations with Susa and Kish in ancient Iran and Babylon.

We are on the eve of discovering and classifying a cruder pottery phase following the richly painted ceramics from Harappa, Mohen-jo-Daro, Amri and Nal. In China also a distinctive type of glossy black wheel-made pottery series had been discovered in Shantung (east of Tsinan-fu) excavated by the National Research Institute in 1930-31. This black pottery technique is now believed to have led to the Shang pottery which was a historical continution of the older series. From Shantung to Honan there seemed to have prevailed a " North-Eastern Culture " (different, however, from the culture of Jehol, Fengtien, Kirin and Heilungkiang) which had the Li tripod as its

symbol and which came into conflict with the richer painted pottery traditions from the East. The Western tradition disappeared yielding place to the Eastern black pottery which triumphed with the Li tripod.

With these finds of the Aeneolithic or Late Neolithic strata archæologists, both is China and in India, must forge ahead and plunge deeper into the early Neolithic and Palæolithic layers. In that dim pre-historic past, China made recently a great contribution through her Peking Man, rivetting the attention of the world of antiquarians. The Sinanthropus has shown definite Mongoloid characteristics and he belongs to the Early Palæolithic Culture which, however, is followed by the culture of a late Palæolithic people who are not pure Mongolian in physical type. Rather they resemble the late Palæolithic Europeans. They may have been wandering hordes marching by the land-routes to the sea as suggested by Weidenreich. Excavations have definitely proved that not only the Ordos region to the North West but also the valley of the Yellow River between modern Shensi and Shansi were inhabited by the Late Palæolithic Man.

In India, unfortunately, so far very little has been done to reconstruct the background of early Neolithic and Palæolithic cultures. The Yale University Mission under Dr. De Terra working in the Siwalik ranges and in North Burma has already drawn our attention to this much neglected field explored partially by the late Dr. Panchanan Mitra, the late Prof. H. C. Dasgupta and a few other Indian scholars. But in every step of the expansion of our studies along these lines, we must constantly refer to the discoveries in China and the Far East.

China and India in the Historical Period

The problem of the first definite historical contact of China with India is very complicated, as I discovered while consulting the eminent French sinologist Paul Pelliot who gave me valuable suggestions relating to the appearance of the name China in the *Artha-sāstra* of Kautilya generally assigned to the Maurya period (4th-2nd century B.C.). Pelliot thinks that the Sanskrit form of the word, *Cīna* (China), can only be derived from the Ts'in or Ch'in Dynasty (255-106 B.C.) founded by Shih Hwang Ti, a contemporary of Asoka. Dr. Laufer somewhat differs from Pelliot and is inclined to admit the possibility of earlier contacts. Laufer's book *Sino-Iranica* has opened our eyes to many unsuspected facts about China's contacts with the West—a line of investigation which has been carried further afield by Rostovtzeff in his *Iranians and Greeks in*

South Russia (1922) and by Hirth in his *China and the Roman Orient.* However, there is little doubt to-day that from *circa* third century B.C. to third century A.D., specially during the Han dynasty (206 B.C.—220 A.D.), India and China vigorously collaborated spiritually as well as culturally; for Buddhism, which linked up the two great nations, was the vehicle of spiritual ideas as much as of artistic inspiration. What remains tantalizing and vague, however, is the striking resemblances in the literature of the two countries, specially in philosophy and political science of the pre-Han or late Chou period. The diplomatic mission of Chang K'ien (130 B.C.) followed by the invitation of the Chinese emperors of the Han dynasty to the learned Indian Buddhist monks definitely prove that the cultural collaboration was in full swing and it was carried on gloriously by the Wei (Turkish), the T'ang, the Sung and the Yuan (Mongol) dynasties. Dr. Laufer's *Chinese Pottery of the Han Dynasty* opened a new vista, just as Edouard Chavannes gave us his archæological findings of inestimable worth.

Two outstanding branches of Art, namely, Sculpture and Painting, which developed under Sino-Indian collaboration, have been discussed by hosts of scholars, Okakura and Omura, Fenollosa and Laurence Binyon, amongst others. Study along these lines have been much facilitated by two standard works : *Chinese Sculpture* by Osvald Siren (1925) and *Chinese Painting* by Arthur Waley (1923). Both are sumptuously illustrated and discuss the documents historically from the Han to the Yuan dynasty. Two occidental periodicals, the *T'oung Pao* and the *Ostasiatische Zeitschrift*, and the splendid Japanese art journal *Kokka* have published monographs, notes and artistic reproductions of outstanding merit which are too numerous to be mentioned. The British and the American schools of sinologists are equally active in collecting and discussing Chinese artistic documents. But one must always remember that these well-printed books are getting out of date from year to year with the new discoveries in the field and more intensive analysis of the documents. Publications by Japanese scholars, unless translated into some European language, necessarily remain outside our notice.

Through the discussions on ancient Chinese bronzes, on the bone, ivory or stone-carvings, we should also try to supply the positive background of the Fine Arts of China flourishing from the early Han to the last Manchu empire. The various stages of the Classical and the Medieval Chinese Art, extending over 2,000 years, have been surveyed more or less thoroughly by well-known scholars who will be mentioned in the select bibliography at the end of our section on Japan. For, as it is well-known, in spite of occasional explosions of hostility (specially since the first Sino-Japanese War to

the China " Incident " of our days), Japanese collectors and connoisseurs, publishers and scholars have done more than any other group to preserve, popularise and interpret Chinese art, specially Chinese painting. The renowed author of the *Epochs of Chinese and Japanese Art*, Ernest Fenollosa, discovered that veteran Japanese art critic Okakura Kakuzo and their happy collaboration made it possible for Boston Museum of Fine Arts (as we have discussed in *Art and Archæology Abroad*) to develop that splendid collection of Sino-Japanese art specimens. Okakura's *Ideals of the East* and his *Book of Tea* opened a new horizon of art appreciation at the beginning of the 20th century, and very soon we found European scholars like H. Giles, Hirth and Chavannes attacking the problems of Chinese art history with rare thoroughness and understanding. Chavannes inspired a group of French sinologists and art critics like Petrucci and Pelliot.

The splendid documentation of *Ars Asiatica* opened its series with a volume on the Chinese paintings at the Cernuschi Museum of Paris (1912). Chavannes lived to see the publication of Petrucci's *Encyclopædia of Chinese Paintings* (1918), an annotated translation of *Chieh-Tzu-Yuan Hua Chuan*, a 17th century treatise on the technique of painting. When I reached Paris after the last World War, Chavannes was no more, but his memory and inspiration were felt everywhere, specially because I had the privilege of working with Prof. Sylvain Lévi and Paul Pelliot who were intimate friends and collaborators of Chavannes. Pelliot was publishing his portfolios on *Touen Huang*, the Grottoes of the Thousand Buddhas, and, over and above his profound researches into Tibetan and Mongolian records, he was publishing his incisive studies helping to elucidate so many difficult problems of Chinese art and archæology.

In 1923, he published in the *T'oung Pao* his " Notes on Some Artists of the Six Dynasties and of the T'ang," and very soon in the *Journal Asiatique* (1923, Vol. CCII) he published his article on the " Statues in Dry Lacquer in the Ancient Chinese Art." Ever since the days when he was a young officer in the French Army in China during the Boxer rebellion, Prof. Pelliot has been serving the cause of Chinese culture indefatigably, and Pelliot Collections could be seen in the Museum of Hanoi (French Indo-China), in the Louvre Gallery and in the Musée Guimet of Paris. In the same Paris group I came to know some eminent lovers of Asiatic Art and Culture like Foucher and Hackin, Granet and Maspero, Victor Goloubew and Serge Eliseev, the last a renowed authority on Japanese painting, and René Grousset, the historian of the Art and Civilisation of Asia.

Meanwhile the German school, backed by the Prussian Academy, were

publishing valuable monographs specially on the Buddhist ruins and frescoes of Chinese Turkistan. Grünwedel's *Mythology of Buddhism in Tibet and in Mongolia* was published as early as 1900 and he was followed by von Le Coq, Müller, Cohn, Kummel and others, enriching our knowledge of Chinese Art. The British school made also substantial contribution through the discoveries and publications of Sir Aurel Stein, always connected with the Archæological Survey of India which has set up a special Central Asian Museum at Delhi to house the " Stein Collection." Another outstanding English critic of Far Eastern Art, in fact its poetic interpreter and historian, is Laurence Binyon of the British Museum. He opened with a volume on *Painting in the Far East*, 1911, he edited the pictorial documents from Touen Huang brought by Stein and recently he delivered profound addresses on the Æsthetics of Oriental Art before the University of Harvard which has published his stimulating lectures as *Man in Asian Art*. Arthur Waley of the British Museum was the first to handle the history of Chinese painting with reference to original Chinese texts, and what an untold treasure of art criticism lies embedded in the original Chinese books and commentaries have also been shown by lovers of Chinese art like Siren and Fergusson.

Visiting China in 1924, in the company of our great Poet Rabindranath Tagore and of our great painter Nandalal Bose, I had the privilege of being introduced to ever so many groups of Chinese artists and art critics of the present day, many of whom could not speak English and who were interpreted by our late lamented friend, the Chinese poet Ssu Tsümo. Amidst a veritable invasion of foreign trinkets and ideologies which jarred on our nerves, we felt the touch of good old China whenever we had the privilege of communicating with her noble leaders like Liang Chi Chao and Hu Shih. I shall also remember with gratitude in this connection the fraternal cooperation offered by our esteemed friend Dr. Li Chi (of the *Academia Sinica*, founded after our departure). He was my friend, philosopher and guide while I set out with Nandalal Bose from Peking to visit the various historic sites and sanctuaries of Chinese Buddhism. While surveying the various collections and temples of Peking, we discussed, now and then, the culture of pre-historic China but we never dreamed that within a few miles from our Peking dwelling would be discovered the remains of the earliest Man of Asia traced so far. While passing through Shantung we waved our respectful salutations to the memory of the venerable Confucius. But I never suspected that the black pottery culture of Neolithic China will be dug out from the soil we were treading. As we passed through Shansi, we remembered its wonderful Buddhist caves of Yun Kang but knew little of the other

antiquities. Approaching the Huang Ho Valley, the cradle of the Chinese race, we visited the first Buddhist temple erected in China, the Pai-ma-ssu or White Horse temple at Lo Yang and also the grand rock-cut shrines and sculptures of Lung-men. We passed Anyang on the way, little suspecting that my learned friend Dr. Li Chi will start digging right there a few years later and will help reconstructing the history of the Shang empire. On our way back we stopped for a while at Kaifeng where the local University offered us its hospitality and requested me to lecture on India and China. The local Museum of Kaifeng had just then acquired a series of remarkable bronze vessels of the Chou period.

Thus the Pre-historic and the Proto-historic, the Classical and the Mediaeval in Chinese Art and Culture entered into our being as we were led from site to site, monument to monument, revealing through a flash of intuition, as it were, the Eternal China. Sometimes she was great, sometimes brought low, but she never failed to suggest that there was an inexhaustible vitality which will triumph over occasional lapses and temporary set-backs. China supplied us with some of the most valuable tools of man's material progress. She has given us also a literature, a philosophy and an art which will survive the shocks of history and will be cherished as the permanent heritage of humanity. It was China and her culture that civilised Korea and Manchuria, and, through Korea, Japan derived some of the permanent elements of her spiritual and artistic life.

NOTE :—Chinese archaeology so far, remained restricted mainly to the finds from North China; but South China also is yielding valuable relics which may revolutionize many of our pet theories. Rev. R. Maglioni in his "Some Aspects of South China Archæological Finds" (Proc. Congress of Pre-historians, Singapore, 1940, pp. 209-229) throws some light : (1) The aboriginal Sosian culture of corded pottery was derived from the Mongolian-Manchurian neolithic culture displaced by the (2) Western Sowian Neolithic (Sumerian) culture of Yang Shao with incised, combed and painted pottery. It developed into the Kansu urns but, with the early discovery of copper and bronze, fostered, (3) the splendid bronze technique of North China while (4) South China took the new line of glazed and stone wares of diaper decorated pottery which derived the classical Chinese art motives from the indigenous Sosian (Mongolian) and the intrusive Sowian (Yang Shao) proto-cultures.

The Chinese cultures of the North and the South can no longer be studied in watertight compartments, as pointed out by Mr. W. Schofield (Proc. Congress of Pre-historians, pp. 280-84) for the typical Chinese characteristics are to be found as much in the objects from the North as from the newly excavated sites from South China like the Laruna Island (Hoifung District of the Kwangtung Province) and Shek Pek (Hongkong). The paucity of Southern cultural sites and materials may be due to the typhoon and other adverse factors of the physical geography of South China which however preserves, according to Rev. Maglioni, the oldest forms and tones of the Chinese language in the Cantonese and Hoklao dialects.

III

Buddhism and the Evolution of Chinese Art

CHINESE art and Chinese aesthetic genius display a marvellous evolution from the pre-historic pottery paintings of Yang Shao and the magnificent bronzes of the Shang and the Chou periods. Emperor Shih Huang Ti, founder of the Ts'in dynasty and builder of the first Chinese Walls, was a contemporary of our great Buddhist Emperor Asoka who was responsible for propagating, in the 3rd century B.C., Buddhism (and through it) Indian culture and art through considerable parts of Asia. His missions, as we know, reached the Mediterranean world on the one hand and Ceylon, Burma and Nepal on the other. The Arthasāstra of Kautilya (commonly attributed to the Maurya period, 4th-2nd. cen. B.C.) mentions clearly the blankets of Nepal and the silk industry of China. So in the famous Notes of General Chang K'ien we find him discovering for the first time the routes from China to India through Central Asia.

The name *Shen-tu*="India," corresponding to Sanskrit *Sindhu*=Indus, was first clearly transcribed in the second century B.C. by this Chinese explorer who visited the North-Western border-lands of India about 125 B.C. Very soon after, we read of two Indian Buddhist monks being invited to China by an emperor of the Han dynasty. There can be no doubt now that during the early and the later Han periods Buddhist India exerted a great influence on the cultural and artistic life of China. Remembering these facts, we shall give a general survey of the evolution of Chinese art, to bring out the significance of this Sino-Indian collaboration in the annals of Asiatic art.

The Chinese word *Hua*, meainng drawing, does not necessarily mean 'painting.' It originally meant nothing more than a scratching or tracing, and, as Waley points out, "often refers to incisions on wood or stone." The earliest literary references and suggestions of pictorial art are contained in the *Shih-King* or the *Book of Odes*, an anthology of songs (13th to 7th century B.C.) a sort of Chinese Rigveda. Human passions roused by love and war are painted against a background of Nature—the most prominent factor in the development of art and poetry in China.

After these literary fragments of the Chou period, where we find something similar to the Vedic Aryan conceptions of nature and man, we find two great philosophers Lao Tzŭ (570-490 B.C.) and K'ung-Fu Tzŭ or Confucius

(551-479 B.C.) dominating the stage of Chinese history. Lao Tzŭ replaced the capricious anthropomorphic gods by his sublime conception of *Tao* or the Primeval Principle governing the Universe. Like the supreme conception of the Upanishadic *Brahman* replacing Vedic deities, Taoism opened a new world of philosophy and art.

After the Taoist apotheosis of the " natural man " comes the Confucian ideal of the " philosopher king," a series of supernaturally wise and disinterested individuals who enlarged their individual personality by a contact with some higher entity. This corresponded very closely to the conception of the union of individual souls with the Brahman, Tao or ' Buddha.' Lao Tzŭ's mysticism formulated the doctrine of *Wu-Wei* or inactivity which corresponded to the *Naishkarma* doctrine of the Gītā and the doctrine of the Void (*Sūnyavāda*) propounded by Nāgārjuna which, again, paradoxically though, helped to develop the famous *Ch'an* or *Zen* (=*Jhāna* or *Dhyāna*) school of painting both in China and in Japan. The Eternal Void or the Formless (*Arūpa*) is the origin of all forms in the realm of philosophy and art. Thus Taoism like the Mahāyāna with its great cult of emancipation developed the traditions of dynamical art. Confucianism, on the other hand, developed the cult of ancestor-worship and of a static civilization where change can only take the form of restoration. This traditionalism of the Confucian school led to the suppression of free speculative thought in the 2nd century B.C. The free-thinkers of China were led by the great sophist, Mo Tzŭ (495-420 B.C.), whose works we get in mutilated texts only. Another arch heretic whose works miraculously escaped destruction is Chaung Tzŭ (350-275 B.C.). He developed the doctrine of relativity, refusing to accept our sense-pictures as realities. But he admitted one positive factor in this world of illusions and that was *Ming*, or illumination, the light of Nature transcending all contradictions. It corresponded very closely to the search of the super-sensuous made by the Yoga philosophers of India.

The poems in the *Book of Odes* were last recorded about 600 B.C. and 300 years after there arose a school of poetry, not in China proper, but in the borderland of Chu, where we find " literature of almost Indian exuberance, wildly fanciful and romantic." In the *Heavenly Questionings* of Ch'ü Yuan, the earliest of this group of poets, we read that the poet saw ancestral shrines with their walls covered with paintings delineating " the marvels of Heaven and Earth, Gods and Spirits, of the hills and streams, ancient sages and their wondrous doings." This reminds strongly of the reference to mural painting in the Rāmāyana; the German scholar Conrady (Z. D. M. G. Vol. 60,

pp. 335-351), tried to show that the *Questionings* probably borrowed things from the Jātakas or other Indian legends. Definite historical contact with India was established with the foundation of the Ts'in dynasty by emperor Shih Huang-ti, a contemporary of Asoka. He built the formidable Chinese Walls, proscribed and burnt most of the records of the Confucian school perpetually praising the immobile past of feudal China. The burning of the books took place in 213 B.C., and the emperor died while seeking to discover " the herb of immortality." In the 3rd century B.C. when Indian philosophers of the Yoga school were developing their mystic doctrine of immortality, Chinese philosopher-magicians were engaged in the discovery of the elixir of life. These Neo-Taoists bridged the gap between orthodox Confucianism and Taoism, through the *Book of Changes* based on ancient magic, and the more recent doctrine of mystery or *Hsüan.*

But the positive scientific spirit soon came with the expansion of geographical knowledge resulting from the discoveries of Chang K'ien (138-126 B.C.). He was the first to bring the knowledge and the name of India, as we find in the famous history of Ssu-ma-Ch'ien who completed his book about 100 B.C., when the gates of Central Asia leading to India, so long blocked by the Hueng-nu and other barbarians, were violently opened by the roving Saka or Scythian tribes. In the 1st century A.D., Indian Buddhist monks and scholars were already invited and settled in China by Emperor Ming-ti in the famous Pai-ma-ssu or White Horse Temple at Loyang. The early Han dynasty introduces us to the first Chinese painter Chang Heng who was also an astronomer and a poet. So the Han poet Wang Yen-shou described the wall-paintings in the great palace at the famous capital city Chang-an. Ashton in his *Chinese Sculpture* has described the series of grave-reliefs evidently reproducing in stone-incision some of the above palace paintings. On the strength of these finds (147 to 149 A.D.) Waley tried to rebut the assertion of Grousset that " but for Buddhist influences Chinese paintings would never have existed."

But no one can dispute that pre-Buddhistic references to pictorial art in China are chiefly literary and rarely documentary in the sense of concrete art objects. A book of the 6th century A.D. records the story that a Hindu priest called Li Fang in Chinese, came with 17 wise men to convert the first emperor of the Ts'in dynasty who was (as has been noted before) a contemporary of Asoka. But the first authentic date of Sino-Indian contact is 2 B.C. when a Chinese courtier received an account of Buddhism from an envoy of the Indo-Scythians who recently founded their Central Asian and North Indian empire. The Khotanese were converted to Buddhism in

83 B.C. according to the Tibetan history of Khotan, and Khotan was the first outpost of Indian culture on its outer march through Kucha, Turfan and other Central Asian places to China. In 70 A.D. Buddhism was officially recognised in China, and in his poem written about 120 A.D. Chang Heng, the painter-poet, speaks of dancing girls " whose beauty neither the Confucian ascetic Chan Chi nor the Shramanas of India could resist." From this Scytho-Kushan epoch onwards, we find that the Buddhist temple-walls came to be systematically covered with paintings as at Ajanta, Bagh and other places in India. The Indian pictorial tradition soon came to be influenced by Iranian styles, which came to dominate Gāndhāra, Bamiyan, Khotan and generally Central Asia, from the rise of the Parthian to that of the Sassanian rulers. It is striking that the worship of Amitābha (Japanese Amida), the Buddha of the Boundless Light, was introduced into China by An Shih-Kao, a Parthian prince who lived (148-177 A.D.) at Lo-Yang and translated the *Sūtra of Paradise* which came to be the basic text for many schools of philosophers and painters in China and Japan.

In 220 the Han empire like its Indian contemporary, the Kushan, broke up, and in 247 A.D. a Sogdian priest dressed like an Indian ascetic entered China by way of Canton. He was, therefore, probably a pioneer introducing Indian art and culture in South China. His name was Seng-Hui (see Chavannes, *T'oung Pao*, Vol. 10, pp. 199-212), and he converted a court painter Tsao Pu-Hsing who took his first lessons in Buddhist iconography and came to be famous as a painter of dragons. He is also reported to have painted huge figures on silk (probably Buddhistic), and his pupil Wei Hsieh introduced paintings with elaboration of details.

After a period of disruption when several dynasties jostled with one another, the petty kingdoms were welded into one great Tartar empire under the Buddhist Wei dynasty (386 A.D.). Contemporaries of the Imperial Guptas, these Buddhist Turkish rulers of North China came to be great builders of rock-cut temples and other monuments. In that momentous epoch China was visited by two great Indians : the scholar Kumāra-jīva (344-413 A.D.) who translated the *Lotus* and *Vimalakīrti Sutras*, and Gunavarman, the painter-missionary (hailing from the royal family of Kashmir), who came all the way to China, through Ceylon and Java to Nanking, introducing a new school of painting. Their contemporary was a great poet Tao Chien (365-427A.D.) who studied Buddhism and founded the White Lotus Society. He spent six years at Nanking where Gunavarman served the cause of Buddhism as a scholar and a painter. A little before the arrival of Gunavarman, the Tile-coffin Temple was founded at Nanking in 364 and

public subscriptions were asked to cover expenses. As the story goes, a very young painter Ku K'ai Chih (born 344 A.D.) and very poor, startled everybody by subscribing a million which he paid in his own original way. He shut himself up for more than a month in the temple and painted such a wonderful figure of Vimalakīrti that when the doors of the chapel were opened a marvellous radiance burst from the walls. Thousands of sightseers and devotees paid so much from day to day that the painter's promise was amply fulfilled. Ku was a great portrait-painter and a few stories recorded of him testify to his sense of humour. When he ate sugarcane he always began at the wrong end saying that he liked to "enter gradually into paradise." Most of his works are lost, and one, "The Admonitions," painted on a roll of silk came to the British Museum where at first it was considered to be an original. But Waley proved it to be a later copy, conserving, however, a few of the original designs of Ku. Very naturally the style of the painting appears to be intermediate between the second century grave-reliefs in Shan-tung and the sixth century wall-paintings at Tun-Huang. "The Admonitions" remained in the Palace collection of emperor Ch'ien Lung till it was looted during the Boxer rising of 1900. It was sold to the British Museum by Captain Johnson in 1903; and Ku's reputation had become so great that some cherished paintings like the Vimalakīrti at the Tofukuji, Kyoto, and a landscape roll at the Metropolitan Museum, New York, are still wrongly attributed to him.

From the visit of the Chinese pilgrim Fa-hien to India, in the early part of the 5th century, we come to know how enthusiastically the Chinese *elite* were taking to Buddhist culture. About 450 A.D. Lu Tan-Wei flourished and gained reputation by painting "Buddha's Mother," "Descent of Manjusri," and such other pictures. The Buddhist idea of dividing things into component elements probably came from India to develop the theory of the "Six Component Parts" of paintings developed by the 5th century painter Hsieh Ho. This theory came to be connected recently with the *Shadanga* or "the Six Limbs" of Indian Art (*Ostasiatische Zeitschrift*, III, 375-377).

Buddhism came to exert different influences on the different racial elements that divided China in the epoch of the Six Dynasties. North China came to be conquered by the Tartars from Siberia and they founded the Wei dynasty by conquering the ancient capital Chang-an or Si-an-fu (in Shensi) where the great Kumāra-jīva settled in 405 and where he found tremendous enthusiasm for Buddhist culture. Fa-hien returned to China in 411 and spent the rest of his life in translating Buddhist texts. Like Kumāra-jīva,

Fa-hien was a subject of the Tartar prince Fu-Chien who ruled over North-West China with his capital at Chang-an. The converted Tartars like the converted Saka-Kushans of India developed a crude yet vigorous Buddhist art in the North. But the indigenous Chinese culture flowed through the rich soil of South China with its centre at Nanking, which, as we know, was visited by Gunavarman in early 5th century. In 522 Sung Yün crossed the Pamir. In 529, Nanking was fortunate to be visited by the silent sage Bodhi-dharma, who is worshipped even today as the patriarch of the Dhyāna (Zen) school of philosophy. A century after Bodhi-dharma, Hiuen Ts'ang set out for India (629) and on his return (645) he devoted his last days till his death in 664 in translating some of the most valuable books. While Kumārajīva introduced philosophic nihilism of the *Sūnyavāda* promulgated by Nāgārjuna, Hiuen Ts'ang introduced the Yogācāra and the *Vijñānavāda* and translated the valuable works of Asanga, Vasubandhu and others. (Grousset : *In the Footsteps of the Buddha,* 1932).

These works played a great part in developing the intellectual life of the T'ang period as well as that of mediæval Japan. But before Japan, Korea obtained in 535 valuable legacies of Buddhism through the monks, professors, doctors and painters. The Koreans derived Buddhist art from Nanking, and from Korea it was transmitted to Japan. That is why the famous Horyuji frescoes of Nara are more Indian than the school of painting of Tun Huang which was more intimately connected with Central Asia, Turkestan and Sassanian Persia. The native Chinese dynasties of the South, on the contrary, trafficked by sea with India, Indo-China and the Malay Archipelago. The Chinese Buddhist art of Liang and Nanking directly influenced the Buddhist art of Korea and through Korea that of Japan.

Before we discuss the marvellous development of painting of the T'ang period, we should remember that diverse traditions and techniques of art flowed into China during the first five centuries of the Christian era when Indian missionaries (both Buddhistic and Brahmanical) were carrying the torch of Indian culture to the farthest limits of Asia. The rock-cut temples of Tun-Huang (450—1100 A.D.) of Yun-Kang (409—560 A.D.) and of Lung-Men (500—750 A.D.) are veritable museums exhibiting a bewildering variety in plastic and pictorial traditions.* Khotanese, Turfanese, Iranian and Indian styles merged in and co-mingled with the indigenous Chinese techniques of vase-paintings and tomb-paintings (of Shantung and Korea) while stucco-paintings and frescoes on the walls of the rock-

* *An Introduction to the Theory of Chinese Sculpture* by Leigh Ashton (1924) ; *Chinese Art* (Burlington Magazine Monographs, 1925) by Laurence Binyon, W. Perceval Yetts and Osvald Siren.

cut temples were evidently derived from India; and even the erotic Tantric cults, according to Grünwedel, deeply influenced the painters of Kucha (vide Grünwedel's *Alt-Kutscha*, 1920).

The early T'ang period closed with the momentous travel records of Hiuen Ts'ang (629-645) and I-Tsing (671-713). The middle period opened with the accession (712) of emperor Ming Huang, who, with his brother Prince Chi, witnessed the noblest efflorescence of Chinese poetry through the immortal works of Li Po (701-762) and Tu Fu, whose largeness of spirit, emotional richness and artistic form are rarely paralleled in literature. China, at this epoch, was far from being isolated. Wu-K'ung (751-90) travelled towards India and Chinese generals marched triumphantly beyond the Pamirs subjugating the Khans of Tartary and the Kings of Samarkand. Kashmir and Gandhara were vassal kingdoms. Syrians, Turks, Persians and Indians flocked to the Chinese capital. Christianity, Buddhism, Manichaeism and Zoroastrianism flourished side by side near about the great T'ang capital of Chang-an, the Rome of Asia. But the over-civilized capital collapsed before the attack of the virile Tartars. The disaster brought the inevitable reaction and a strengthening of the conservative party whose mouthpiece was the famous writer Han Yu (768—824) who wanted to take China to pre-Buddhistic times, free from mysticism, pacifism and other 'heresies.' In 845, Buddhism along with other foreign religions suffered the most tragic persecution. Nearly 5,000 Buddhist monasteries and 40,000 temples were reported to have been destroyed, naturally throwing into oblivion innumerable manuscripts and masterpieces of art, including the priceless frescoes of the greatest painter of the epoch, Wu Tao-Tzŭ.

Paintings of China, Korea and Japan

Quite apart from the unique value of Chinese paintings as works of art, they are indispensable landmarks in the history of Asiatic aesthetics. Chinese painting is the noble offspring of Indian idealism and Chinese æsthetic genius. The earlier phases of this cross-fertilization are unfortunately obliterated by the cruel hand of time, but thanks to the ceaseless researches of archæologists and art-historians, we catch a glimpse of that glorious age of cultural collaboration when the whole of Asia under the inspiration of Buddhism was breathing like one integral being. Studies of the pictorial remains of Bamiyan and Hadda, Khotan and Kucha, Turfan and Tun-Huang have demonstrated clearly the line of migration of this composite art along the Northern land route. But there was also a Southern Asiatic line of art-migration across the sea from India through Indonesia

to South China and thence to Korea and Japan, as has been ably argued by Dr. Visser in his monograph published in the *Influences of Indian Art.* Prince Gunavarman the painter-missionary from Kashmir, was probably a pioneer in the southern sea route. But Kashmir of his age (400 A.D.) was also the university of the great Kumāra-jīva who came all the way from the Indo-European speaking 'Tokharian' state of Kucha to Kashmir to learn Sanskrit and various Indian sciences which he later brought over to China. So the routes might differ, but the artistic and cultural traditions offer points of homogeneity amidst all kinds of ethnic and regional diversities. The Irano-Afghan, Parthian, Hellenic and even Roman influences were clearly visible in the art of Central Asia. While Foucher is of opinion that the Turkish Kushans "had not direct influence on Indo-Greek art," Waley strongly asserts that "Central Asia has influenced India quite as much as India influenced Central Asia." Central Asian influences are noticeable in many Indian art-motives specially those of the Mathura School. So we find the influence of Græco-Roman art on the Yun-Kang reliefs and that of Turfan paintings on the early T'ang frescoes discovered in Tun-Huang which, in the 7th century, came under China and developed remarkably Chinese features. Tun-Huang appears to-day as a sort of art-reservoir into which several Western Asiatic art currents flowed in, and out of which emerged various Far Eastern aesthetic currents, connecting the art traditions of China with those of Korea and Japan. In tracing the history of the early T'ang painters, Waley very appropriately remembers that Chinese painters often took lessons in painting from foreign priests. Such a painter-monk was Seng-Hui, a Sogdian; another was an Indian whose Chinese name may be retranslated into Dharma Gupta; another foreign painter of the Sui dynasty was a member of the Khotanese royal family and it has been admitted that the Khotanese School of painting forms the primal source of many later Chinese and Japanese pictorial traditions. Most of these foreign painter-monks visited China in the 6th and 7th centuries, and an Indian named Sākya Buddha is reported to have painted foreign animals as well as "a picture showing the customs of the *Fu-lin* country or the Byzantine Empire." The Khotanese painter is reported to have painted "the dancing girls of Kucha," and his works and designs of birds and flowers, men and deities are judged by the 14th century treatise of art-criticism, the *Hua Chien*, as outlandish and lacking the dignity and restraint of Chinese art. The same book records that the Korean type of Avalokitesvara is based on the designs of the Khotanese painter, Wei-Chih I-Seng (630 A.D.). From the concrete realistic the painter Yen Li-Te took to the new line of subtle suggestions in expressing special moods like

a lyric poet. He also painted the historical picture of the departure of the Chinese princess to marry the Tibetan King (641) Srong-btsan-sgam-po, who also married in the Nepalese royal family, thus uniting closely for the first time the artistic traditions of India and China through Tibet. The younger brother of Li-Te was another great painter, Yen Li-Pen (born about 600 A.D.). In 643 he was employed to paint portraits of 24 famous men of the time for 'the National Portrait Gallery.' His most celebrated picture "the visit of Manjusrī to Vimalakīrti" was probably the model for the treatment of the same subject in the frescoes of Tun-Huang as described by Pelliot. Another Tun-Huang fresco, the Procession of the Donor, described both by Pelliot and Stein, is supposed to be the source of inspiration if not the origin of the Tosa School of Japan. But Waley is not inclined to accept the theory. He is inclined rather to trace the Tosa school of painters' works to the indigenous Japanese Genji scroll painting of Takayoshi (1100 A.D.). Some critics however are inclined to connect the famous wall paintings of Horyuji temple at Nara with the Indian frescoes of Ajanta or with those of Khotan. Waley admits the possibility of collaboration of the Khotanese painter Yen Li Pen, and upholds the local tradition that the Horyuji frescoes were painted about 712 A.D. by a Korean in the style of the 7th century Chinese Buddhist art.

The great painter Wu Tao-Tzŭ, born in Honan about 700, is reported to have painted 300 frescoes to decorate the temple walls at Chang-an and Lo Yang. Unfortunately most of his works along with those temples were destroyed after the persecution of Buddhists in 845. Hence many works attributed to him are now found out to be later copies. But he was undoubtedly the founder of a great school, as we know from references to his many pupils, and he influenced both contemporary painting and sculpture. Wu Tao-Tzŭ, however, so far as we can judge from later catalogues, painted very rarely the Western Paradise or its presiding deity Amitābha dominating the highly conservative provincial school of Tun-Huang. The 7th century iconography was dominated by Amitābha, just as the 5th was dominated by Maitreya and the 6th by Sākyamuni.

Waley considers the Tun-Huang school as an independent offshoot of the Northern 6th century school founded by Chung-ta, the Sogdian. Against this provincial school we find at Chang-an quasi-Tantric sects and divinities, *e.g.*, the five Vidyārājas, the matronly forms of Avalokitesvara and a huge procession of Lohans or Arhats. As early as 520 A.D. or about a century after the landing of Gunavarman at Nanking, there arrived at Canton, the famous missionary Bodhi-dharma from Southern India. He

belonged to a princely family, and the reigning emperor of China who was a patron of Buddhism welcomed him, and their conversation at the Nanking palace is described by Waley in his chapter on Zen Buddhism and Zen artists.

Another South Indian, the third patriarch Vajra-bodhi, reached China in 719 and died there in 792. The fourth patriarch Subha-kara was a Central Indian prince who arrived in China in 716 and died there in 735. The fifth patriarch Amogha-vajra enjoyed great prestige during the reign of Ming-Huang and died in 774. The portraits of these patriarchs were made by eminent painters like Li Chen, Chou Fang (780-805 A.D.) and others. In 804 the famous Japanese priest Kobo Daishi, the founder of Koyasan monastery, arrived in China, learnt the doctrines of the magic sect (*Mantra-yāna*) from the sixth patriarch Hui-Kuo, and returned to Japan in 807 with a number of paintings and portraits attributed to Li Chen, now preserved in the Toji temple in Kyoto.

These link up the art of China and Japan intimately. Waley has reproduced a wonderful Japanese copy made in 735 of a sixth century Chinese scroll. This "Search for Buddha" (who has left the palace) is now a treasure of the Imperial Museum of Kyoto. In some points this scroll reminds us of the life-scenes on the Stein banner collections from Tun-Huang, which, however, show an astonishing advance in power of co-ordination and in the suggestion of space and planes. Quite a literature has recently developed, based on the pictorial treasures from Tun-Huang revealed by Stein and Pelliot. The valuable pictorial documents of Tun-Huang date from the beginning of the 7th century to the end of the 10th century. Here we read clearly two distinct types of influences : (1) the Indian style, manifesting successively through Gandharian, Gupta and Pāla models; (2) and Iranian and Central Asian types of painting as we find from the fragments discovered in Bamiyan and Hadda in Afghanistan as well as from Khotan, Turfan and Kucha. All these styles, however, were adapted to Chinese purposes and progressively transformed by the Chinese genius. The stages of assimilation may sometimes be clearly traced. In some cases we find the iconography of the paintings proclaiming an unmixed descent from the Gupta (Ajanta) or the Pāla schools; sometimes, as in the case of minor divinities, flying figures, etc., experts have discovered that there were links between analogous types at Ajanta on the one hand and those of the Korean tomb of Sammyori (6th century A.D.), the coffin plate from Koryo (now in the Government Museum at Seoul), and lastly, the flying angels of Horyuji in Japan. Japanese archæologists have recently discovered Korean frescoes of great importance, proving the progressive migration of pictorial

motifs from North China and Korea to Japan. The paintings on the tomb near Phyong-an represent noble lords and ladies with their attendants dating from about 590 A.D. according to Andreas Eckardt, author of *A History of Korean Art*. They seemed to represent a school of court painting in high style reminding us of the stiff elegance of the Wei or Sui dynasty figurines. The Korean frescoes and the Tun-Huang banners furnish us with specimens of the work of the provincial schools. Sometimes the Chinese type is found to be fused with the Græco-Roman, as in the portrait of Kshitigarbha in Tun-Huang. So we notice in the painting of the *Loka-pālas* a fusion of Sassanian and Chinese styles, just as we find at Bazakliq and Turfan explored by Professors Grünwedel and Von Le Coq. Prof. Paul Pelliot has made public his collection of the Tun-Huang paintings in his admirable volumes *Les Grottes de Touen-Huang*. So Stein's collection has been ably described by Laurence Binyon in the sumptuous reproductions of *The Thousand Buddhas*. These Tun-Huang paintings now deposited in the Musée Guimet of Paris and in the British Museum of London are the only fortunate survivals which enable us to distinguish the T'ang, the Five dynasties and the early Sung styles in portraiture, caricature, animal art and landscape. They lead naturally to the now famous scroll of "Admonitions" attributed to Ku-K'ai Chih, but which, as proved by Prof. Pelliot, was a later T'ang copy of the old master whose paintings are lost to us, like the works of T'ang painters Ku Tao-Tzu, Li Chao-Tao and Wang Wei—whose sketches are only suggested to us to-day by later copies mostly preserved in Japan.

The Great Sung Revival—960-1279

The T'ang dynasty collapsed in 907 followed by a period of feudal anarchy for nearly half a century, during which Chinese generals or Turkish mercenaries contended with one another. In 960, the whole of China, (with the exception of Peking districts captured by the Khitan Tartars), was unified by the Sung dynasty which maintained the political and cultural integrity of China for more than 300 years. But in 1125, the Sung empire was divided when the whole of North China with the Imperial Sung capital at Kaifeng was occupied by the Juchen Tartars. So the National Chinese Empire came to be confined to Southern China. The Northern Tartar Kin empire (with capital in Peking), was conquered in 1234 by the Mongols under Chengiz Khan and the Southern Sung empire also was conquered in 1279 by the Mongols under the great emperor Kublai Khan. In spite of these Turko-Mongolian invasions and conquests, China under the Sung emperors developed the most vigorous and original schools of painting and

aesthetic idealism—so much so that the whole school of Japanese painting was profoundly influenced by the Sung masters.

Aesthetic criticism was also a distinctive feature of this period of intellectualisation of Chinese art, which further manifested itself in and through the archæological works of the Sung antiquarians as noticed by Dr. Li Chi. T'ang realism was yielding place to an intellectual idealism where the artists were not seeking the world of concrete forms or the real universe but an idealised reflection of the universe. This tendency is the result of the reaction of Mahāyāna Buddhism fused with the native mysticism of the Taoists. This fusion produced the galaxy of T'ang poets like Li Po (701-762), Tu Fu (712-770), Kang Wei (699-759) and Po Chu-I (772-846). These poets were seeking the " soul of things," and like them the Sung masters of the pictorial and ceramic art transcended the material ideals of the previous age and took their stand on intellectual and mystic idealism bringing about a veritable renaissance in Chinese art. Without any touch of sentimentality and personal romanticism, the Sung artists made their marvellous landscapes, " bathed in mist and lost in infinite distances," which appear to us " as poignant as a human countenance." From the ephemeral outward forms, the Sung artists tried to take us to the Cosmic Essence which animates the universe. Eminent authorities like Otto Fischer in his *Chinesische Landschaftsmalerei* (Munich, 1921) and Arthur Waley in *Zen Buddhism* (London, 1932) have tried to analyse the beauty and sublimity of the Sung masters. They discovered as the best medium of expression, monochrome painting in washes of Chinese ink. For the foregrounds they used pure colours and " for the more distant planes they mixed the colours with Chinese ink which darkened them without diminishing their transparency. In so doing they invented chiaroscuro and half-tones, in short impressions by means of which the Chinese landscape painters obtained effects of amazing mastery." (Grousset : *China*, p. 302). The influence of the Dhyāna Ch'ān or the Zen school of Buddhism seems to be clear, as suggested by Petrucci who says, " the haze lends a magical aspect to an impression of emptiness and immensity." In many cases the Sung landscapes appear to be translation in line or colour of the poets of the T'ang renaissance, some of whom like Wang Wei (born in 699 at Tai Yuan Fu in Shansi) were painters as well.

As in the landscape so in portrait-painting the Sung masters revealed a rare intellectual and almost animistic quality; for they had to serve a religious or social purpose, for portraiture was connected with ancestor worship both in China and in Egypt, as observed by Prof. Serge Eliseev.

We mention the principal Sung painters of the 10th and 11th centuries when Kaifeng was still the capital : Fan K'uan (990-1030) was a great artist and a few of his paintings or those attributed to him are to be found in the Boston Museum of Fine Arts. Kuo Hsi (1020-1090) is supposed to be the author of the magnificent monochrome roll entitled " Autumn in the valley of the Yellow River," now in the Freer Gallery of Washington. Many such valuable paintings, now in U. S. A., have been catalogued and noticed by Prof. Sirén in his *Chinese Paintings in the American Collections.* The paintings of Chao Ta-nien (1080-1100) are treasured by A. Tetsuma of Tokyo and by Hara Tomitaro of Yokohama. The most famous of the Sung masters was Li Lung Mien (1040-1106)[1] Li Lung Mien's works are in the Freer Gallery and in the Marquis Kuroda Naganari's collections in Tokyo. The emperor Hui Tsung (1101-1125) was a collector as well as a painter and calligraphist, an aesthete as well as an archæologist. He built a regular museum in his palace at Kaifeng-fu. He is reputed to be the author of a painting now in the Boston Museum entitled " Ladies engaged in preparing Silk " which may be only a copy made by the emperor of a T'ang original.

Emperor Hui Tsung organised the schools of painting, hitherto subordinated to the Literary College, into a regular State Academy of Painting. Examinations in paintings were instituted and based closely upon the literary examination. The emperor himself excelled in monochrome paintings of rocks and flowers, of birds and bamboos. The Chinese regard the bamboo as a symbol of culture and refinement. Kaifeng fell into the hands of the Kin-Tartars who destroyed most of his art collections, and the emperor himself was carried away as captive to Manchuria.

The new Sung capital Hangchow came to be the seat of the Southern school of Sung painting, and one of the greatest landscape painters of the Far East, Ma Yuan (1190-1224), belonged to the Hangchow school. He not only influenced the later Chinese painters but also the Japanese school of Kano, and therefore many of his paintings are treasured by Japanese collectors, though some of his works could also be seen in Boston and Washington.[2]

1. He was fascinated by the wonderful horses presented to the emperor by the rulers of Khotan. But with his sudden conversion to Buddhism, he abandoned horse-painting and devoted himself to the copying of the religious painters of the T'ang dynasty. His contemporary was the eccentric artist Mi Fei (1051-1107) who excelled in painting cloudy mountains. He was a great connoisseur of antiquities and a passionote collector of painting and calligraphy. The Sung period witnessed the dawn of the modern science of archæology and critical study of antiquities, for which Dr. Li Chi has paid a glorious tribute to the Sung masters (vide : Li Chi—*Chinese Archæology*).

2. When the Mongols captured Hangchow in 1276, the Chinese lost interest in the mystical school of Zen painting and the brooding romantic art of 13th century. In that age of

Ma Yuan combined the majestic power of T'ang art with the masterliness and suggestiveness of the Sung style. His son Ma Lin was also a great painter, and painting in this age seemed to be a hereditary genius. Ma Lin was followed by Hsia Kuei (1180-1234), whose romantic delicacy was contrasted with the harsh strength of Ma Yuan. In the first half of the 13th century there flourished the school of Liang Kai who excelled in portraits of hermits or poets treated in a synthetic and humorous manner, imitated by later Sino-Japanese painters down to Hokusai. His masterpiece is the standing figure of Sākya-muni meditating close beside a torrent, now belonging to the collection of Count Sakai Tadamichi. The last of the great Sung artists was Mu-chi. He came from South-West of China to Hangchow about 1215 A.D. He revived the ruined monastery of Liu Tung-ssu, making it the centre of a famous school of painting, " using the swift erratic type of monochromes to record quickly the fading visions and exaltations." He was still plying his brush about 1250 making one of the " loftiest pictures of Chinese Buddhism on the eve of the Mongol conquest, as though the ancient Chinese culture before disappearing had desired its whole soul to be expressed by one of its most profound geniuses." The face of the Arhat Vanavāsī, according to Grousset, while " lit up with an infinite gentleness has a grandeur worthy of Michael Angelo . . . . on the eve of perishing the soul of China had embraced the whole universe."

Chinese Sculptural and Pictorial Traditions

To appreciate fully the significance of T'ang art with its distinctly cosmopolitan tendencies, one must study closely on parallel lines, the apparently different yet organically uniform development of Chinese sculpture and painting from the Han to the T'ang periods. China developed indigenous forms and styles long before the Indian or the Græco-Buddhist art and that indigenous style is best illustrated in the animal sculpture of the Han period discovered in Ssuchuan and Shantung. These winged carnivores, guardian lions in stone at the tombs and other terracotta relics of mortuary art of the Han period are naturally and stylistically connected with the majestic animal figures near the 6th century tombs of the Liang dynasty.

neglect, the Japanese admirers could easily remove to their country the masterpieces of Ma Yuan, Hsi Kuei and such romantic landscape painters of the Court. They also removed the treasure of minor arts from the Zen monastaries of China, and that is how the Japanese artists of the Ashikaga peirod (1393-1573) could reproduce with astonishing thoroughness the character of the Southern Sung art. Many Zen monks from Western China took refuge in Japan owing to the Mongol conquest, just as it happened once again during the Manchu invasion in the 17th century.

The tremendous energy, the sweeping lines and some special ornaments of these majestic animals have reminded Osvald Siren of the proud spirit of the Viking art and he has compared " the Chinese dragons of this period with those carved 300 or 400 years later on the Runic stones and the wooden furniture in Scandinavia." It seems now within the range of historical probability that China came to have cultural relations with far off Scandinavia through Siberia and South Russia. The Russian archæologist Rostovtzeff tried to explain many such artistic parallelisms on the hypothesis of a Græco-Sarmatian art. Prof. Siren further develops the theory by emphasising a Scytho-Sarmatian influence. These Scythian elements in Chinese art remind us of the Saka-Kushān phase in the evolution of Indian art in the early centuries of the Christian era. That was followed by a distinctly Iranian phase marked by the Indo-Parthian, the Indo-Afghan and the Indo-Sassanian intermediaries. And finally, like the Hūnas invading India, we find the Wei Tartars conquering China only to emerge in history as ardent champions of Indian religion and art, as we find from their remarkable architectural and sculptural relics at Yun-Kang, Lung Men and other places.

The Græco-Roman influences, no doubt, marched into China with early Buddhism but the nomad Wei Tartars from the North, after conquering China, proved themselves very different from mere bloodthirsty invaders. They, like the Saka-Kushāns of India, assimilated Indian Buddhism and Chinese culture so rapidly that an authority on Chinese-Buddhist art like Mr. Parceval Yetts could argue convincinly that the art now associated with the Wei people was essentially Chinese and not foreign or nomadic as one would expect it to be.

Thus another strong similarity emerged in the assimilative capacities of India and China with regard to the various alien or quasi-foreign elements intruding into their historical frame. The peculiar dress, ornaments, weapons and animal motives in bronze, clay or stone, when studied in detail, would lead to important revelations. Dr. Laufer, in his *Chinese Pottery of the Han Dynasty*, has given us valuable suggestions with regard to the dragons, gryphons, tigers, bucks, horses etc. and these emerge in a new form amongst the pottery figures discovered in the tombs of the T'ang dynasty. The Canadian Royal Ontario Museum of Toronto offers the best collection for the study of the contents of such tombs with their " cavalcades of horsemen, camels with their grooms, ladies, attendants, dancers, actors and musicians." These were probably offered as actual sacrifices in ancient days when a Chinese noble or a chief died, as was the custom at Ur of the Chaldeans, revealed by recent excavations. But with the progress of civilisation,

and probably under the influence of Buddhism, these images came to be substituted for living beings. This humanising influence of Buddhism is writ large on the art of Central Asia no less than on the art of Tun-Huang, Yun-Kang and Lung Men. Between 351-394 A.D., Tun-Huang lay within the territory of a stock called Ti who are now supposed to be Tibetans who became conspicuous in the history of Central Asia only in the 7th century A.D. as we know from the career of their great king Sroug-btsan-sgam-po, contemporary of Hiuen Ts'ang.

Tun-Huang and Yun-Kang Cave Temples

The earliest rock-cut temple in the Mo-Kao cave (8 miles South East of Tun-Huang) was consecrated in 366 by a priest named Lo Tsun and by 700 A.D. there were already more than 1000 caves. Examining the Wei paintings at caves numbering, 18, 70, 120, 130, 135, 139, 140 etc., Arthur Waley observes : "the main cult figures (Buddhas and Bodhi-sattvas), which depended for their efficacy on an exact conformity to Indian prototypes, retained their exotic luxuriances of outlines. But the anecdotal scenes which crowd in upon them on every side are typically Chinese. Here are the landscape mannerisms of Ku-K'ai-Chih, the sprightly animals of the pre-T'ang painted vases, and Confucian attitudes straight from the grave-reliefs of Shantung." In cave No. 120 N. as pointed out by Prof. Pelliot, we find Crusader-like horsemen drawn in Chinese style but with a wholly "occidental air," although chronologically such cavalry equipment (probably derived from the Iranians or Sarmatians) became fashionable in Europe only in the middle of the 13th century A.D.

From the grottoes of Tun-Huang, situated in the Kansu province in Western China, one reaches Shansi by traditional routes and at Yun-Kang near Ta T'ung Fu there are over twenty caves. Chronologically these caves come after the earliest grottoes of Tun-Huang but they contain certain features which are common with those of Tun-Huang and of Ajanta. The flying figures, the *kinnaras* appearing on the vaults are derived from those in the Ajanta cave. The small *stūpas* placed at the top of the pagodas in Caves I and II are of pure Indian type. The Dvārapālas or guardians are partly Chinese and partly Indian and some of them are armed with Trisūlas or tridents which went to show that, as in Khotan, so here at Yun-Kang early Buddhism came to be fused with Saivism, a phenomenon noticed as early as the Kushān coins (1st and 2nd centuries A.D.). There is an inevitable confusion of iconographic details and attributes but in the images we find

unmistakable evidence of Brahmanical deities entering China under the banner of Buddhism.

Cave Nos. VIII and X show curious figures, one a five-headed six-armed being carrying the sun, the moon, a bow, an arrow and a bird, seated on a pea-cock. This is an incarnation of Kārtikeya, called by Prof. Siren, a Garudarāja; another figure with three-heads and eight arms which carries similar attributes and rides a bull is undoubtedly Maheswara, just as we find him in a painting from Tun-Huang now in the Musée Guimet of Paris. The same God clad in tiger-skin appears with his favourite son, Ganesha (both passing for Bodhi-sattvas) as we find them amongst the relics of ancient Khotan described by Sir Aurel Stein. After a minute examination of the draperies of the monumental Buddha figures, Prof. Siren came to the conclusion that Yun-Kang sculptures were based, if not directly, at least indirectly on the Mathurā sculpture of the late Kushān and the Gupta period. But side by side we find images and art motifs which are distinctly Chinese or Iranian, *e.g.*, acanthus stems interspersed with birds, animals, capitals and patterns of Sassanian art which have lately been discovered by the French archæologists in such abundance in Afghanistan. The facial types and features are also highly varied and many of them remind us of the stucco-heads brought from Afghanistan and Turkestan, as described by Hackin and Pelliot, von Le Coq and Stein. The best Yun-Kang Buddhas breathe an atmosphere of profound spirituality but unfortunately the caves, and with them the sculptures, being carved on soft granular stone, have deteriorated considerably and what is worse, shocking debasements have followed as the result of very crude recent restoration.

Lung Men Caves in Honan

The northern Wei emperors transferred in 495 their capital from Ta T'ung Fu to Lo Yang in the Honan province, literally honey-combed with antiquities. While journeying through this province with Dr. Li Chi, I was constantly reminded by him of the variety and richness of the archaeological finds. The earliest cave of Lung Men, Ku Yang Tung, was excavated towards the end of the 5th century and, as in Ajanta, the cave architecture evolved through several centuries, and many of the later additions disturbed the harmony of the original design and decoration. Often the grottoes appear in a defaced and dirty condition and such a sad disfiguration is found in the largest of all, the Pin Qang grotto. The archæological mission of Edouard Chavannes furnished us with the first exhaustive and scholarly accounts of the caves. From Honan we notice the migration of Buddhist

sculpture to Shensi in the West and Shantung in the East and although the Indian influence is dominant in the execution of the largest hieratic statues, yet the individuality of Chinese artistic genius asserted itself in the treatment of attendant deities and accessory figures who are typical children of Chinese myths and legends.

In 618, General Li Yuan, aided by his son Li Shah Min, a great military genius, founded the famous T'ang dynasty deposing the rulers of the house of Sui. Before entering the T'ang period proper we should remember that the very short Sui Dynasty marks the Golden Age of Buddhist sculpture in China. The most striking specimens are from the cave of Tien-Lung-Shan and those, according to Prof. Siren, are so closely related to some of the Mathurā sculptures of the 5th and the 6th centuries A.D., that he supposed that some Indian artists, well-acquainted with the Mathurā school, might have worked for sometime at Tien-Lung-Shan where, in the later T'ang period also. we find a distinctly Indian character as against the styles of contemporary Chinese sculptures. The Indian current was strongest in Shensi, more diluted in Shantung and Chihli and quite faint and sporadic in the sculptures of Honan and Shansi.

Art of the T'ang Period and After

General Li Yuan who founded the T'ang dynasty (618) leaned towards Confucianism when he ascended the throne as emperor Kao-Tsu and the famous historian of his reign, Fu I was definitely against the monastic orders. The next emperor T'ai-tsung (627-649) was the patron of Hiuen Ts'ang who returned from India in 645 with important scriptural texts, copies of the famous images of Buddha and other art treasures. At this epoch, Chang-an was the veritable Rome of the Orient where many foreign nations sent embassies and tributes and rival cults like Buddhism and Taoism, Nestorian Christianity and Manichæism preached their respective philosophies, thanks to the enlightened tolerance of the emperor. The sculptures deposited by Hiuen Ts'ang in the " Temple of the great Blessings " exercised considerable influence on Chinese sculptural types. Other Chinese pilgrims and envoys, travelling to and from India undoubtedly exerted artistic influences on the sculptural and pictorial art of China. This interesting chapter, hitherto unknown, has been revealed to us by the brilliant researches of the renowned French sinologist Paul Pelliot who, in 1928, published in *T'oung Pao* (Vol. 22) his " Notes on some Artists of the Six Dynasties and of the T'ang period." The imperial envoy Wang Hsüan-ts'e probably made four journeys to India. He is reported to have been accompanied by an artist called

Sung Fa Chih who is said to have made the drawings of the Maitreya statue at Bodh-Gaya. He was also commissioned by Hiuen Ts'ang on the eve of his death (664) to execute a statue of the Buddha. The third emperor Kao Tsung (650-684) was deeply interested in Buddhism and fostered Buddhist architecture, sculpture and painting.

But while the imperial treasury was emptied for the benefit of Buddhist temples, the Kitans or the Tibetans and the Turks were invading the Northern provinces inflicting great suffering on the common people. Already there was a tendency to decadence in the sculptural arts as we find from the complaint of the contemporary Buddhist scholar, Tao Hsuan, who wrote in his History of Buddhism in China that the " sculptors made their religious images look like dancing girls." Still everybody admits that some of the finest sculptures of Lung Men in Honan and Tien-Lung-Shan in Shansi come from the period of emperor Kao Tsung and empress Wu Hou. Another group of Buddhist sculptures come from Sian-fu (Shensi) mostly carved in grey limestone or yellowish marble. Most of these Buddha types betray an Indian ancestry but " crossed with powerful indigenous elements of style inherited from previous epochs of Buddhist art in China." The facial types are not Indian but decidedly Chinese and the Bodhi-sattvas are sometimes quite feminine in treatment. Against that tendency we find a healthy reaction in the virile and masculine representation of the *bhikshus* and priests. In these portrait statues, the Chinese genius found its full play and they reflect a power and dignity seldom found before. The narrow waist and tight drapery of some of the Buddhas testify to Indian influence. From after 700 A.D. we find the influence of Buddhism on the crude Taoistic sculptures which attained to artistic dignity several centuries after, in the Yuan period. But then the Taoist painters were infinitely superior to the sculptors.

In bronze-casting and in minor arts of the T'ang period we often find " Chinese translations of Indian prototypes." We also notice intrusions of Persian or Irano-Hellenistic decorative motives. The sculptural activities of this period reached their zenith in some of the grand statues of Lung Men and Tien-Lung-Shan. But alas ! as Prof. Siren has observed, many of the statues had their heads knocked off and exported *via* Peking to Europe. Such artistic vandalism should be stopped by international legislation. Another interesting series of T'ang sculpture is found at Shen Tung-ssu in Shantung province. Here we find a benevolent Chinese smile transforming the austerities of Indian Buddhism. The Chinese had a tendency to humanize religion even at the risk of vulgarising it partially.

Secular sculptures, mostly of animals, are found at the imperial tombs of the T'ang and the Sung dynasties in Shensi and Honan. Early styles of animal carving are represented in some of the lions executed towards the beginning of the Ming period. Under emperor Hsuan Tsung (713-756) Zoroastrianism, Christianity and even Mohamedanism flourished freely and in the capital city there was a great development of poetry, music and painting and some of the greatest Chinese artists for all ages lived in this epoch. The Tibetans, suddenly growing into great power, temporarily closed the channels of communication between China and India and the emperor is said to have furnished the Tibetans a set of Confucian classics in order to elevate their character and teach them lessons of justice and morality. But alas the Tartar General of the emperor captured and devastated Chang-an in 756 and priceless works of art, specially the paintings of unsurpassed masters, like Wu Tao Tzu and Wang Wei, were destroyed for ever.

From 700 A.D. we notice a few remarkable changes. From the point of view of iconography, Sākyamuni and Maitreya, so common in earlier sculpture, came to be overshadowed by their later emanations Amitābha and Vairochana. Also we find that the statues are bending and standing at the hips, thus developing an expressional movement so different from their frontal and static positions of the earlier schools. Moreover, secondary figures like the Arhats and Lokapālas appeared to have been very popular, offering as they did greater scope to the creative genius and to the hunger for variety in the artists. Prof. Siren was fascinated by one remarkable Bhikshu figure which " expresses the most intense religious adoration, not in the usual restraint and well-balanced form but with an overflow of human feeling that completely dominates the whole conception."

Later Schools of Painting

That already signalises the fact that the flow of the creative spirit of China was about to burst the bounds of stone sculpture and melt into the variegated rhythms of line and colour. The great age of Chinese painting was dawning and it is very significant that, in keeping with this new urge, a new plastic representation in wood and dry lacquer (the Ch'u technique) came into vogue. The artists found those materials more suitable than stone for gaining pictorial effects and they could finish the statues with colours and thus could accentuate the play of light and shade. The earliest wooden statues known so far are those brought from Tun Huang by Prof. Pelliot who traces the history of this art in a valuable article (*Journal Asiatique*, 1923) on " Dry lacquer statues in ancient Chinese art." From China this

art travelled to Japan to find there its veritable apotheosis. In many of these wooden statues we see not only a symbolic image but a semi-divine, semi-human being, lovable and tender towards the adorers. The Kwanyin of this epoch charms us with an womanly grace so different from the hieratic qualities of the Bodhi-sattvas. Just as wood was allowed to replace stone, so iron came to replace bronze, for we find bronze figures to be less and less numerous from the end of the T'ang period. Wood and iron as mediums easily lend themselves to pictorial treatment and very soon we find a new stylistic evolution through the use of clay which permitted almost infinite scope for plastic variation. These wall decorations in clay may be called " a translation of painting into plastic material " as we find it to be very common in the Sung and the Ming periods famous in history for their pictorial achievements. The composition as well as the modes of decoration will continue to grow more and more free and pictorial till we come to the Yuan dynasty. That brings to our mind the fact that China again came to be dominated by the powerful Tartar tribes who conquered the whole of the North and forced the indigenous Chinese rulers and artists to be confined to the South where we find that painting was practically the only art practised under the Southern Sung dynasty.

How painting came to influence sculpture could be seen from decorations on the Chi Hsia-ssu pagoda near Nanking and also from the rock carvings and the reliefs near Hangchow executed between the 10th and 12th centuries. The cave sculptures at Ling Yen-ssu near Hangchow offer the largest variety which remind us more of painting than of sculpture. The Southern School of Chinese Art is considered by some critics to be the meeting ground of Indian art traditions which, modifying the Chinese forms, passed them on to Korea and Japan (*vide* Visser : *Indian Influence on Far Eastern Art*).

Inspite of the insecurity, the feuds and conquests of the Tartars who established the Liao and the Chin dynasties in the North, the Sung period as a whole show remarkable activity in the field of decorative sculpture while in painting they were unsurpassed. When the Mongols conquered China, establishing the Yuan dynasty, there followed a definite set-back; for art was no longer a hand-maid to religion but came to be used for the glorification of the temporal power. The Yuan officials were Confucians and so the Buddhists were temporarily thrown to the background, although we find that the Mongol emperors, coming under the influence of Tibetan Lamaism, invited many Tibetan and Nepalese artists to the Mongol Court which developed special studios for them. About 1263, the Nepalese artist Aniko was

attached to the court of Kublai Khan and trained many Chinese artists like Liu Yuan.

Yuan art shows an increasing interest in the material side of life and their painting also betrays realistic tendencies which were rejected by the Ming artists who turned away from the foreign influences and tried to rekindle the ideals of the great T'ang epoch. Rejecting the florid decorations of *baroque* character which developed under the foreign Mongol regime, the native Ming artists tried a veritable revival of national glory in art and culture. In this work they followed in the footsteps of the indigenous Sung masters who displayed a rare combination of creative and antiquarian interests. In the Ming period we find, no doubt, an intense activity in all fields of art, especially in architecture. But they betray a lack of vitality and their pre-occupation with technical methods made the Ming art appear rich in ornamental details and yet bereft of the deeper meanings of life and its realization. While they showed admirable enthusiasm for the restoration and conservation of ancient temples and other monuments, yet their interest was not so much religious as archæological. Their creative energy appears to " have dried up in the sands of academic speculation and naturally led to a pseudo-revival of art during the 18th century which was decorative but not revealing and which failed to recall to life the ancient religion and idealism of China."

Chinese Art in the Yuan, Ming and Manchu Epochs

Between 1211-1234 Northern China was overrun by the Mongols who conquered the Southern Sung empire also between 1234 and 1279. The great emperor Kublai Khan (1259-94) founded the Yuan dynasty which lasted from 1279-1369. He claimed suzerainty over Central Asia, Persia and Russia ; he invaded Japan, though unsuccessfully, as well as Indo-China and Java. He introduced the Nepalo-Tibetan art and Buddhism of medieval India and Tibet but he patronised Confucianism which was the main influence of the art of the Yuan period. He tried to carry on the Sung tradition in many respects although there was also a return to the realistic art of the T'ang period with its animal *motifs* and military subjects. In 1216 Meng-Fu became secretary of the Han-Lin Academy and almost enjoyed the reputation of a Prime Minister. Though he was a conservative Confucian, he possessed a good general knowledge of Taoism and Buddhism. He enjoyed such a high reputation as a calligrapher that " an Indian priest travelled thousands of miles in order to procure a specimen of his handwriting." Thus the idealism of the Sung school came to be blended with

the realism of the Mongol epoch, as we find in the work of Chao Ming-Fu (1254-1322). He was a prince of the Sung family who fraternised with the Mongols and became the favourite artist of Kublai and his successors. Kublai Khan was one of the greatest military geniuses of history who conquered practically the whole of Asia. China was the only power which resisted the Mongol advance but China was conquered by Kublai who thus became the master of continental Asia from 1260 A.D., when he founded the Buddhist-Mongol Yuan dynasty. Trade routes were opened across the continental Asia stimulating economic and cultural exchanges and Marco Polo, the famous Venetian traveller, together with his father and uncle, served the Great Khan as his officers. Kublai invaded Indo-China, Burma and Indonesia and, being a champion of Tibetan Buddhism, invited scholars, artists and craftsmen from Tibet and Nepal, through which Indian arts and crafts influenced China. The bronze-caster of the then China was called *Balbo-chi* or Nepal Man. Chao Ming Fu and Huang Kung Ming were the renowned painters of the Yung period. With art, literature also awakened to new life and novels and dramas developed under the patronage of the Mongol Emperors. In one project Kublai was unsuccessful. He failed to conquer Japan inspite of two naval expeditions in 1274 and 1281. From his new capital Khan Baligh (modern Peking). Kublai followed the wise policy of religious tolerance of his ancestors. who sponsored the first miniature Parliament of Religions in their former headquarters of Karakorum (Mongolia). The Mongols, if they were not creative, were cosmopolitan in their sympathies and thus they indirectly helped in liberating Chinese genius from the intense subjectivism of the Southern Sung artists. In 1259, the Mogul Emperor Mangu Khan sent Chang Te as an envoy to his brother Hulagu Khan, King of Persia. and on his return Chang Te published a diary of his journey mentioning the rare products of the Western countries. This renewed contact with the West, as in the great age of the T'ang emperors, produced the Neo-T'ang style of the Yuan period with its special emphasis on the representation of animals as well as of special ethnic types. The horses as well as the horsemen of the Chao Ming-Fu school are admirable in dynamic qualities and the artists display a veritable genius in animal painting, as we see from the works of the Chao school found in Boston, Washington, Paris and London. No less remarkable were their portraits of horsemen : the Mongols of the Gobi, the Kitan of North China, the Turks of Kashgar, the Tangut of Si-hsia, the Tartar ponies of Mongolia, the great horses of Trans-Oxiana combined to form a marvellous portrait gallery. M. Grousset has very aptly observed in this connection :

" It is impossible to imagine more accurate ethnographical and historical documents than these representations of the Mongol cavalry which conquered the world." The Yuan Emperors were great patrons of minor arts and crafts as well, for they established a regular studio for carvings in ivory and rhinoceros-horn, as noted by Dr. Laufer in his *Ivory in China* (pp. 68) : " In this court atelier, conches, tables, implements and girdle ornaments inlaid with ivory and horn were turned out for the imperial household." Prof. Pelliot has also shown that many Tibeto-Nepalese artisans, specially bronze-casters were imported into China and patronised by the Court. This fresh contact of China with the medieval centres of Buddhism like Tibet, Nepal and North Bengal (which was the real source of the art inspiration), helped in transforming the war-like character of the Mongol emperors who began to show a definite leaning towards Buddhism. The official religion of the Mongols was Tibetan Lamaism. A great deal of Tibeto-Buddhist art was thus imported and imitated by the Chinese artists in the 14th century. But very few of them survived the violent anti-Mongol reaction of the Ming period. However, the native tradition of Buddhist and Taoist paintings was continued by Wen Hui, Wang Li (who died about 1370) and by Chang-ssu Kung who was a Ming official between 1403-1425. Japanese critics discovered traces of Tibetan influence in the colouring at the Sākyamuni trinity of Chang-ssu Kung. Thus religious painting came to be greatly honoured and Wen Hui, a favourite artist of the 14th century Yuan court, painted hermits and Arhats of a rare mystic quality. With this revival of Buddhism came also a revival of fresco painting. Many of these frescoes, coming from the Chih-li, the Shansi and neighbouring provinces, passed into the George Eumorfopoulos collection described by Laurence Binyon and Paul Pelliot. These frescoes were mistaken for T'ang creations while really they testify to the Neo-T'ang activities of the Chinese artists of the Yuan and the Ming periods. The Ming frescoes reveal feminine grace and ordered composition and they were much removed from the vigorous earlier models.

The Ming Period—1350-1644

The end of the Mongol domination was foreshadowed by the revolt of Southern China in 1351 culminating in the expulsion of the Mongols in 1388 from Peking. This assertion of the South in the crisis of Chinese history is significant for the cultural history of China, quite apart from political results. This has been demonstrated by my esteemed friend Dr. Hu Shih in his brilliant paper on " The Chinese Renaissance " (Peking, 1923)

which he very kindly presented to me during my first visit to China in 1924. With the early period of barbarisation of Northern China during the 4th, 5th and 6th centuries, the cultural centre of gravity was shifted to Southern China. This age of displacement and disturbance was an age of songs and lyrics. The rude races of the North were makers of heroic and warlike songs, while lyrics of love formed the bulk of the popular literature of Southern China. The simplicity and unmistakable beauty of these popular compositions influenced considerably the great poets of the T'ang period who tried to conform to the popular style. The greatest poet of mid-T'ang period, Po-Chu-I, is said to have rejected or revised his compositions which could not be understood by an old woman. Chinese prose literature also was influenced at this epoch by the popular preachings of the Dhyāna school of Buddhism.

North China was subjected to a second period of barbarisation from the 10th to the 14th century, starting with the Kitan Tartars and ending with the expulsion of the Mongols in 1388. While the result of these barbarian conquests were disastrous from the point of view of Chinese political and social life, they produced " immense beneficial effects on the language and literature of the people." The Mongol edicts and the public documents were composed in terribly barbarised Chinese, Mongol syntax being simply clothed in Chinese characters. But the despotism of the classical language and literature was removed with the official suspension of the classical examinations for 80 years (1237-1313). So the greatest writers now had to write with a view to educate and entertain the people. Thus arose the great dramas of Yuan period, written by authors from the lowest stratum of society. This necessity of educating the barbarians as well as the barbarised population gave rise to a new class of prose literature known as popular histories which soon developed into historical novels and then into novels of all kinds. These crude originals of the Mongol period underwent a series of collective and individual revisions, until they appeared in their finished form in the 16th century.

The re-establishment of the National Empire with the Ming dynasty (1350-1644) brought back temporarily the severe classical tradition, and the new dramas composed by the literati became unintelligible to the majority. Fortunately the novels remained uncontaminated by the reactionary classical influences and continued to develop, although most of the novelists (despised as a class and yet plying profitable a profession) remained anonymous. The Manchu rulers after their conquest in 1644 allowed the authors to attach their names to the novels. For the last 400 years the Chinese nobles helped in standardising the national language, and exerted a tremen-

dous educative influence through their favoured authors who were some of the greatest propagandists and teachers of China, as pointed out by Dr. Hu Shih.

The Ming dynasty with its first Emperor Hung-wu (1368-98) pursued a policy of strict conservatism and narrow nationalism which contradicted the traditions of cosmopolitan China in the 13th and 14th century, where we find all languages and religions tolerated under a Pan-Asiatic Empire, with Turkish, Persian, Tibetan, Nepalo-Indian, Italian and Armenian races fraternising with the Mongols and the Chinese. In 1342 the Mongol emperor received a Papal legate in Peking just as his forbears in the previous century patronised a miniature Parliament of Religions in their ancestral home of Karakorum. These cosmopolitan influences were resisted by the Ming emperors, perpetually threatened by the barbarian Tartars. This timidity infected the Ming art, which was erudite but imitative and lacking in creative impulse. Landscapes and portraits were still remarkable, but soon degenerated into pretty and dainty trifles, although some of the exquisite ceramic works came from the Ming period. The Ming artists ever looked for their models to the Sung masters and often it is difficult to distinguish between the average Sung and Ming creations. The Ming masters left to art-lovers charming landscapes, perfect paintings of flowers and birds as well as a series of delicate portraits, some even rivalling the school of Holbein : Shen-Chou (1427-1509), the landscape painter, Wen-Cheng Ming (1470-1559), painter and poet, and Tang-Yin (1470-1523), the renowned woman portraitist, are some of the outstanding artists of the Ming school, well represented in the museums of Japan, America and Europe. The last great figure in the art world of the Ming period was Tung Chi-Chang (1554-1636) who rose to be the president of the Board of Rites. For over half a century he enjoyed the highest reputation as a statesman, painter, calligrapher, archæologist and a writer on art. The following passage will explain his psychology : " From T'ang till Sung, the different schools. It is like the five divisions of the Dhyāna (Zen) sect in Buddhism. A single phrase, often a single word, is enough to tell the listener to which sect the speaker belongs." According to him the Southern school began with Wang Wei who was the first to use light washes. Tung was the last of the generation of scholar painters. But the creative period was over, and the Chinese mind turned instinctively to art criticism. The scholar landscape painter Li Lien Fung (about 1600 A.D.) started the famous Encyclopædia of Chinese Art translated by the French scholar Raphael Petrucci, now available to us under the title " The Precepts of Painting the Garden the Size of a Grain of Mustard Seed." The work was continued through the 17th and 18th centu-

ries, finally codifying all the academic precepts and theories of art. The supreme achievements of the Ming artists were neither in painting nor in bronzes, but in their ceramic objects, which are unique treasures of human art creation, unsurpassed by any other school of ceramic artists.

From 1644 to 1912 China was under the Ching or Manchu emperors, the two greatest if whom were K'ang-Hsi (1661-1722) and Ch'ien-Lung (1736-1796) who restored the historic frontiers of the Chinese empires by conquering Mongolia, Eastern Turkestan and Tibet. During this period we notice a progressive decadence of sculpture and painting in which we find the mechanical continuation of the Ming styles. But in the department of ceramic art, the Chinese reached the very zenith under the patronage of Manchu rulers, who were very sympathetic to occidental artists like the Jesuit Father Castiglione and others. Ch'ien-Lung was a great art-collector, and in 1749 was published an exhaustive catalogue of his collection, the *Hsi Ch'ing Ku Chien* which was saved for posterity, thanks to the enthusiasm of Japanese art lovers. They published in 1888 exact facsimiles of the original Chinese catalogue, in a quarto edition of all the documents in photographic reproduction. In our chapter on Japan we shall try to bring out this history of artistic collaboration of China and Japan, so important in the annals of Asiatic art.

IV

Collections of Chinese Art and Archaeology

So prepare a mere inventory of Chinese manuscripts and art treasures, removed from China and sequestered in the various public and private collections of Europe and America, is a task of international significance. It should have been taken up by the National Government of China in collaboration with the International Institute of Intellectual Co-operation, which has a special division known as the International Office of Museums. But it is a matter of deep regret that while China, like India, paid enormous subsidies as subscription to the coffers of the League of Nations, it has done very little by way of such useful surveys, even if the restoration and conservation work proved too heavy for the League experts. Consequently, a scholar interested in tracing the valuable Chinese works of art abroad must have the leisure and rather the rare financial resources to travel all over the Occident and study the exhibits in the public museums as well as in private collections. The British Museum, London, the Louvre, the Musée Guimet and the Musée Cernuschi of Paris, the State Museum and the Folk Museum of Berlin, together with the smaller, yet none the less important Chinese collections in Russia, Sweden, Holland, Italy and other countries, go to demonstrate how many of the national artistic patrimonies of China lie scattered in foreign lands. The New World also, specially Canada and the United States, have developed Chinese collections of outstanding merit, specially in Toronto and in the McGill University, Canada, in the Boston Museum of Fine Arts, in the Metropolitan Museum of New York and other places. Benjamin March has rendered a real service by compiling a short yet useful list of the Chinese and Japanese collections in the American Museums. For the present, we shall indicate some of the important museums and research institutions which have been functioning with more or less efficiency in the various cultural centres of the Chinese Republic.

Palace Museum of Peking

Privileged to accompanying Dr. Rabindranath Tagore in his cultural mission to China, I visited the splendid museum in 1924 when the last Manchu Emperor, Hsüan Tung, invited us to the historic palace in the Forbidden City. Dr. H. R. Johnston, private tutor to the Emperor, was all courtesy to us, and I could see some of the rarest treasures of Chinese art

in the historical setting of the Palace which very soon after changed its complexion with the flight of the Emperor who emerged in history as Emperor Pu Yi of Manchukuo. After his departure, the Palace Museum was formally inaugurated (October, 1925), and for the benefit of the public a detailed inventory of the valuable palace collection was made, each article being numbered, labelled, recorded and, according to importance, photographed. Thus the contents of each room of the palace were made known to the public for the first time. Since 1914, the Ministry of the Interior was maintaining the Peking Museum of Antiquities occupying the Outer Court of the Forbidden City. In the Outer Court we find the three great Throne Halls. Tai Ho Tien or the Hall of Supreme Harmony was the centre of ceremonial life, where the most important state functions were formally held with great pomp and splendour. It is the most impressive of all the imperial structures, 200 feet long, 100 feet wide and 110 feet high. Five richly carved marble steps lead to lofty terraces where we find wonderful bronze cisterns, incense-burners, the sun and moon dials, and other treasures removed to Peking in 1914 from the former Imperial Palaces at Mukden and Jehol. The exhibits number over 200,000 articles, and 10 volumes were necessary to complete its catalogue of paintings and calligraphy. This museum in the Outer Court came, in November 1930, under the jurisdiction of the National Palace Museum, occupying the Inner Courts or the Northern section of the former Imperial Palace. It is divided into five sections, the most important being the Chien Ching Kung or the Hall of Resplendent Brilliancy. Behind it are the halls of Imperial Wedding and the Throne Hall of the Empress, beyond which is the wonderful imperial garden where the young Emperor with his beautiful queen received the Indian Poet and his party. Many large pavilions in the palace have been turned into exhibition rooms, some always open to the public and the remainder open on special occasions. From nowhere could we form a better idea of Chinese court life, its gorgeous architecture and wonderful furniture and interior decorations, as from our visit to the palaces of the Forbidden City.

Important Collections of the Peking Museum

From the point of view of antiquity, the bronzes are the finest things in the Museum, dating from 1500 to 1000 B.C. and coming from the Shang and the Chou dynasty. Next in importance come the objects of jade and other precious stones. A rock-shaped jade block is named "the mountain of longevity," and the wonderful jade basin representing a lake is called "the

sea of happiness." The ivory collection is no less remarkable, and to form an idea of the historical value of these objects of art, one has only to consult the learned monographs of Dr. B. Laufer of the Field Museum of Chicago, on *Jade* (1912) and *Ivory in China* (1925).

More than 6,000 specimens of Chinese porcelain come from the various famous kilns from the Sung to the Ming dynasty. In modelling, design and colouring, they mark the apogée of Chinese art. The earliest Chinese painting has unfortunately been lost to China, as it now decorates the British Museum. The oldest in the Palace Museum come from the Ts'in dynasty (265-419 A.D.). I saw one or two small sketches of remarkable vigour attributed to the T'ang dynasty. Thence onward the pictorial documents become more copious, for we find over 8,000 scrolls from the Sung, Yuan and Ming epochs. The museum authorities have already published several volumes of reproductions of selected paintings and four volumes of portraits of Manchu Emperors and Empresses.

Amongst the miscellaneous collection we find real gems of minor arts in ancient bronze mirrors, ivory fans, snuff bottles, painting and writing materials, carved bamboos, brocades, tapestries, carved lacquer, cloisonné enamels, etc. Students of Indian art also will find valuable materials in the statues, paintings and religious relics of Buddhism from India, Nepal and Tibet. I was agreeably surprised to find several apparently diplomatic documents written in Nāgari or derivatives of Nāgari script, possibly from Nepal, which might have sent embassies to the Chinese Court.

That reminds us of the fact that the Palace Museum is also the depository of the largest collection of ancient manuscripts, books, and historical records. According to the statistics of 1931, there were about 370,000 volumes, and many of them were the only copies in existence. The famous Chinese Encyclopædia (5,000 vols.), printed in 1724 on *Kaihua* paper from movable blocks, is there. So many original editions of books printed during the Sung, Yuan and Ming dynasties are deposited, together with about 36,000 manuscript volumes from the Imperial Library of Emperor Ch'ien Lung. A great number of unpublished edicts, memorials and historical maps is kept, together with imperial robes, shields, ornaments and various other objects of historical or literary value.

The annual budget of the museum amounts to $432,000 plus $123,312 for special expenses during 1934-35. The museum, amongst other publications, issues an illustrated bi-weekly and also the Palace Museum monthly. Peking is also proud of its National Library, which contains rare documents of artistic and historical value. It has more than 15,000 sets of rubbings

of bronzes and stone tablets, and many Mongolian and Tibetan books, together with Manchu translations of Chinese works. In 1929, the library purchased a unique collection of 99 volumes of printed Buddhist Sūtras in the Hsi Hsia (Tangut) language, and some Buddhist paintings. Moreover, the library has a good collection of Buddhist texts from the 8,500 manuscripts discovered in Tun Huang caves, mostly from the T'ang dynasty.

The private library of over 41,000 volumes of our noble host Liang Chi Chao with his own manuscripts have been deposited by his heirs in the National Library which started operating in 1910 and was reorganised in 1925 when the Ministry of Education agreed to co-operate with the China Foundation for the Promotion of Education and Culture (U. S. A.) paying in 1934-35 $275,000. In 1933, the National Library possessed 500,000 volumes of Chinese works and about 85,000 volumes in European languages, as well as works in Arabic, Hebrew, Turkish, Persian and other Asiatic languages—a veritable museum of Oriental culture.

Before the transference of political power to Nanking, the cultural capital of China was undoubtedly Peking, which alone had nine universities which were amalgamated (1927) to form the National University of Peiping. These universities, of course, are so many colleges, and the earliest, the Metropolitan University, was started in 1898. In 1908, the American Government returned to China a portion of the Boxer indemnity which went to the foundation of a splendid college which we visited in 1924 and which developed into the Tsing Hua University in 1925. It takes interest in ancient culture, publishing *A Commentary to the Kaçyapa-parivarta* in Chinese and Tibetan, as well as a study on *The Prehistoric Relics of Hsi Yin Tsun.* Dr. P. C. Chang, an authority on Chinese drama, was the Dean of the University, who showed us its splendid library and other departments.

Invited by the National University of Peking to deliver lectures on Indian Art which were interpreted in Chinese by my esteemed friend Dr. Hu Shih, I came in touch with many outstanding art-critics and antiquarians who were deeply interested in Indian art and archæology. Dr. Hu Shih, one of the leading spirits of the Chinese renaissance in the Republican epoch and who introduced John Dewey, Bertrand Russel and other celebrities to the Chinese public, not only introduced me and Mr. Nandalal Bose to the artistic circles of the metropolis, but, in consultation with Liang Chi Chao, secured for us the co-operation of eminent scholars like Liang-ssu-Ming, the philosopher, and Dr. Li Chi, the archæologist, who guided my steps (1924) through the historical sites and relics of China.

Nandalal's masterly brush-work was keenly appreciated by the expert

painters of Peking. Some of them worked in their private studios, while others helped in the establishment (1918) of the Peking Art School which developed into the National Academy of Fine Arts. Between 1928-34, the Academy operated as the College of Fine Arts of the National University. It attained independent status with the annual subsidy of $120,000 from the Ministry of Education. It offers three years' courses in painting, sculpture, industrial and decorative arts. The Peiping School of Fine Arts is an independent non-official organisation which was founded in the year of our visit (1924). It was maintained by an income from private sources amounting to $21,000 per annum.

Three major American learned societies contributed to build research centres in China. In 1906 was founded the Union Medical College which was maintained by a joint English and American mission board until July, 1915, when the Rockefeller Foundation assumed the full financial support and developed it into the now famous Peiping Union Medical College wherefrom the Canadian Prof. Davidson Black and Dr. F. Weidenreich of Heidelberg contributed so much to the scientific evaluation of the Peking Man.

The Yale University also finances many projects under its Yale-in-China programme, and the University of Harvard was entrusted to administer a trust under the will of the late Charles M. Hall to " conduct and provide research, instruction and publication in the culture of China." The Harvard University entered into an agreement with the Yen-ching University which was created in 1917 and which grew out of an institution founded as early as 1867 by the American mission board. It started the Women's College in 1905 and in 1934-35 showed the total student roll of 250 women and 550 men. Its annual budget is met by the American trustees. The Harvard-Yenching Institute for the last ten years (1928 onwards) is promoting researches in the fields of Chinese philology, history, literature, philosophy, religion, art and archæology. In 1929, the Sino-Indian Institute of Peiping developed through the co-operation of Alexander von Stael-Holstein who so kindly guided us in 1924 and who was the Professor of Sanskrit of the Harvard University, resident in Peking. He tried for years together to train advanced scholars in Sanskrit, Tibetan and Mongolian. A profound student of the history of Buddhism, Baron Stael-Holstein recited to me some of the forgotten hymns of Asvaghosa which he had recovered. He also kindly presented me, before my departure, with a copy of Chinese-Buddhist iconographical texts, which I handed over to my friend Dr. P. C. Bagchi, and I was glad to find later on that the text was utilized by my colleague Prof. Jitendranath Banerji co-operating with Dr. Bagchi.

An old fellow-student of mine at the classes of Prof. Paul Pelliot (College de France) was Prof. Serge Eliseev, an authority on Japanese art who is now one of the directors of the Harvard-Yenching Research faculty.

The second portion of the American Boxer indemnity amounting to 12,545,000 gold dollars came to be returned to China in the year of our visit (1924), when it was decided that the fund would be paid in twenty annual instalments, up to 1945, and was to be devoted to the development of scientific knowledge and technical training. This was the history of the China Foundation for the Promotion of Education and Culture which maintains several scientific research fellowships and professorships, and gives subsidies to several cultural institutions.

Cultural Institutes of Nanking

With the formation of the National Government in the spring of 1927, the Central Political Council of Nanking took a momentous step by authorising the establishment of the *Academia Sinica*, advocated long ago by the late Dr. Sun Yat Sen. Starting work in June, 1928, the Academy began to attend to the (*a*) pursuit of scientific research, and the (*b*) promotion and co-ordination of scientific studies in China, through international conferences, lectures, broadcasting, etc. The Academy maintains a National Research Council, composed of thirty members selected from the experts of the country. It maintains ten institutions devoted to Astronomy, Biology, Chemistry, Engineering, Geology, History and Philology, Meteorology, Psychology, Physics, and Social Sciences. Most of them are located in Nanking, but some are in Shanghai and Peking.

For the students of cultural history, the Institute of History and Philology is of special interest. At the time of its inception in 1928, it was located in Canton. Later on, removed to Peking, the Institute was again shifted to Shanghai after the Manchurian incident of 1932 and finally established in Nanking (1934). Its section of historical studies continues to function from Peking, where alone one could find rare original texts, specially the archives of the Ming and the Ching dynasties. This section attends to the textual criticism of ancient classics, the study of bronze and stone inscriptions and other problems of Chinese history.*

The section of Linguistics promotes researches on Experimental Phone-

*The Peking Committee started excavation works (1930) at I-Hsien in the Hupeh Province. It also started excavating (1933) in Sian-Fu and other parts of Shensi, in co-operation with the Archæological Society of Shensi.

tics, on General Linguistics, and on Chinese Dialects and Borderland Languages. It organised Sound Archives and studies on Hsi-Hsia texts as well as comparative studies on English and Chinese intonation. Its division of Anthropology undertook the study of ancient Chinese skulls, correlation of cranial indices and of Chinese finger-prints. It also organised systematic anthropological and ethnological surveys of the Provinces of Szechuan and Yunnan.

Last, though not the least, is the section of Archæology, which, as we have noted above, has gathered a wonderfully rich harvest within a very short time. Among other things it has initiated a survey of the Painted Pottery sites in Honan, and researches on the Pre-historic Remains in Manchuria and Jehol. Excavations of the Black Pottery sites in Honan and Shantung have been conducted. A happy collaboration between the Institute and the Freer Gallery of Washington has led to the financing of the momentous excavations at Anyang under Dr. Li Chi, leading to the extraordinary discoveries of Shang culture of 2nd millennium B.C.

When we visited Nanking, it still looked like a provincial capital, but within the last ten years it has undergone a phenomenal growth. Quite apart from its being the headquarters of *Academia Sinica,* Nanking established in March, 1938, the Institute of Chinese Cultural Studies in the University of Nanking. Its annual revenue of $32,000 (1934-35) came from the American Hall Fund administered by the Harvard-Yenching Institute. The Institute has to its credit important publications like *A Catalogue of the Recorded Paintings of Successive Dynasties* (6 Vols.); *Bronzes from 12 Peiping Collections* (2 Vols.); *A Survey of Contemporary Japanese Sinology;* and several studies on the Oracle Bone Inscriptions.

The Nanking Museum of Antiquities, founded in 1915, was taken over by the Ministry of Education in 1928. The Ministry grants an annual subsidy of about $4,000 helping the museum to exhibit, for the benefit of the public education, its valuable collection of paintings, rubbings and other antiquities in its six exhibition halls. In 1933, a preparatory committee was entrusted with the task of organising the National Central Museum. The Ministry of Finance sanctioned annual grant of $24,000 to the committee which started its work under the chairmanship of my friend, Dr. Li Chi.

A most interesting branch of applied arts was developed in 1928 in the form of the Ceramic Laboratory managed by the *Academia Sinica* and the National Central University of Nanking. It not only undertakes researches contributing to the further development of ceramic industry, but also applies itself to the study of ancient Chinese ceramics, analysing the bodies and the

glazes of the wares, so that we may understand the composition of Chinese porcelain and the method of its manufacture in ancient days.

From Canton and Amoy to Keifeng and Sinan there are innumerable centres showing collections of art and archæology which have not yet been satisfactorily catalogued, and which, let us hope, the Museum Association of China would be able to co-ordinate for the benefit of the outside public. The Archæology Society of Honan (Keifeng), and the Archæological Museum of the West China University (Chengtu), among others, are discovering and developing valuable collections. China, as we all know, co-operated with other Asiatic nations mainly through her North-Western provinces, which, owing to later political disturbances, were neglected, although they were on the life-lines of the Han and the T'ang Empires.

Recently a scientific mission to North-Western China was organised (1927) by the Federation of Scientific Institutions of China. It started a systematic archæological exploration in collaboration with the Swedish explorer Dr. Sven Hedin, well-known in India as the author of *Trans-Himalaya*. The Han archæological finds of Dr. F. Bergman were turned over to the scholars of this society, who also undertook the study of the Han dynasty manuscripts on wooden strips. The archæological finds of the T'ang Dynasty made by Mr. Huang Wen-Pi are also being studied. During 1932-33, over 90 wall-paintings and 50 clay-figures were repaired, and an illustrated manograph on the Kao-Ch'ang Pottery was compiled. An annual grant of $15,000 comes from the China Foundation for the Promotion of Education and Culture.

Shanghai, although a modern city compared with Peking, enjoys the benefit of some very progressive and well-equipped scientific institutions, the most outstanding being the Royal Asiatic Society, North China Branch. It was established in 1857 under the name of the Shanghai Literary and Scientific Society. It was affiliated in 1858 to the Royal Asiatic Society of Great Britain. The British Government made a gift in 1871 of a fine building at 20, Museum Road, which is the Society's headquarters. An entirely new building was added in 1933, and the Society in proud to show a membership of 719 members of all nationalities. Its annual budget (1933-34) amounts to $20,000, out of which $6,000 come as grant from the Shanghai Municipal Council. Apart from the Journal, the Society has other valuable publications. Amongst its many learned office-bearers I had the privilege of meeting (1924) Mr. A. de C. Sowerby, the learned editor of the *China Journal of Science and Arts*, and the author of *Nature in Chinese Art* (1940). He very kindly helped me with the latest bulletins, reports and above all, with

the splendid guide-book, *The Shanghai Museum*, which he published in 1936 when he was the honorary Director. The Society founded its Museum in 1874, and it has grown to be one of the best arranged and scientifically treated collections on China wich no scholar can afford to ignore. Prehistoric arrow-heads, stone-carvings, ancient bronzes, tomb-figures, pottery, porcelain, coins and precious stones are exhibited with sedulous care. The mammals, birds and fishes of China together with the life-like reconstruction of the Peking Man are all scenically mounted. Of special interest are the remains of extinct animals, such as the Mastodon, Stegodon and Hipparion or three-toed horse, most of them coming probably from the Szechuan province. Its sections on Natural History, Zoology, Botany, Geology, Anthropology, etc., are object-lessons for museum workers. Thus the Shanghai Museum and the attached Library of the Royal Asiatic Society, North China Branch, are veritable sancturies of Sinology which no student of Asiatic culture can afford to ignore.

Thus, like Egyptology throwing invaluable lights on the history of Western civilisation, Sinology, in its archæological scientific and artistic aspects, is tending to be the most valuable scale of computation of the cultural progress of Man in Asia and of the Pacific civilisation as a whole.

CHAPTER XII

JAPAN

I

Pre-Historic Japan

THE traditional habit of writing history out of *literary* documents coming mostly from the " civilised " epoch has long deprived countries like India, China and Japan of the light radiating from *non-literary* sources such as the evidences of archæology and anthropology. In India all studies used to begin with the Vedic literature beyond which few dared to go. But the concreate finds of he Indus Valley Civilisation have forced Indologists now to take their start at least a thousand years before the advent of the Vedic Aryans.

In Japan, the old school of historians similarly depended on the literary traditions conserved in their historical and literary annals of a later date (700-800 A.D.), like he Kojiki, the Nihongi, The Nihon Shoki and the Manyoshu. But thanks to the growing interest of Japanese and foreign scholars in the study of pre-historic Japan, we are on the threshold of a new presentation of Japanese history and culture intimately connected with the continental Chinese and the vast Oceanic civilisations. This new school of thought is represented by the veteran archæologist Dr. Ryuzo Torii who with his talented wife and daughter had led several expeditions into the extreme east of China which, according to him, was from time immemorial connected with Japan geologically as well as culturally. So far traces of the old stone age culture have not yet been found either in Japan or in Korea and Manchuria. But when the neighbouring city of Peking has sprung the greatest surprise on us with the hoary Peking Man, some of his cousins may also be discovered in regions farther east. Already Dr. J. G. Andersson, the leading Swedish authority on pre-historic China, has instituted some striking comparisons with reference to the archeological finds of Dr. Torii. In an article on " The Cave Deposit at Sha Kuo T'un in Fengtien " (*Paleontologica Sinica*, 1923) Andersson compared the polished stone celts and pottery fragments of that neolithic site with similar discoveries made by Dr. Torii in Eastern Mongolia and South Manchuria. A very characteristic common type of tools is represented by the flaked arrow-point of flint-like material which Dr.

Torii characterised as the " Mongol type " different from the " Manchu arrow-head " which is polished and generally made of slate. There is also a striking similarity between the Manchu arrow-points from Fengtien and and those from Honan; and although Dr. Andersson does not fully agree with Dr. Torii in all details, he was inclined to see in such similarity of types " an indication of relationship between the peoples who lived in those widely separated areas." Another characteristic specimen, the Li-tripod, is found in Honan and in Fengtein but not traced so far in the pottery collection of Dr. Torii whose monograph " Populations Pre-historiques de la Manchourie Meridionale " is of outstanding merit in spite of certain obvious defects inevitable in a pioneer study. Dr. Torii also discovered, in course of his examinations in Eastern Mongolia, a coin of the second Han dynasty together with a chipped arrow-point which continue to be used even in comparatively late historical times. Thus future scholars have got to fill up in Eastern Asia as well as in India the vast gaps between the aeneolithic culture of *circa* 4th-3rd millennium B.C. and the fully developed metal age culture of the beginning of the Christian era. But the work of reconstruction is progressing, and it is time for us to take stock of the positive finds of archaeology and anthropology in Japan and her neighbouring zones of Eastern Asia.

We have noticed in our section on Pre-historic China how the Honan sites with its Yang Shao and Anyang cultures have offered certain types of tools and potteries which have made Dr. Andersson, Dr. Creel and others to think in term of cultural relations and contacts between the Honan zones, Eastern Mongolia, Manchuria, Korea and possibly pre-historic Japan as well. The intrusion of Pacific culture into China appears not to be improbable today, specially because fresh discoveries from year to year are forcing us to revise many of our old notions with regard to the antiquity of races and cultures of the Far East. The Yang Shao culture in Honan was taken by Dr. Andersson to belong to the end of the neolithic era or rather the aeneolithic age, when, as we find in our Indus Valley culture, man still depended upon the use of stone but had also learnt the use of metal and demonstrated rare skill in making ceramic products of great variety and excellence. The existence of wheel-made pottery in Eastern Asia, in the Indus Valley and other sites, made some European scholars suppose that the wheel was an argument against such antiquity as the third millennium B.C. But modern researches seemed to confirm the rival theory that while the wheel appeared comparatively late in the Western world, the type that appears in the pre-historic sites of the Far East proved the potter's wheel to be of an indigenous type which evolved towards the end of the Neolithic age. Forrar, in *Real-*

lexikon der Pre-historishen, observes that the potter's wheel was invented in the Near East where it has been in use since the Neolithic times. Egyptian neolithic clay vessels are wheel-made and from Egypt the wheel technique entered Greece in the third millennium B.C., in Italy in the second millennium B.C. and thence to Central Europe in the Iron Age (after 1000 B.C.). So Hoernes, in *Kultur der Urzeit,* remarks that in Egypt the copper-stone age culture flourished from 5000 to 3000 B.C. Thus in dating the copper-stone age cultures of India, China and the Far East we may have to take it earlier, as Dr. H. de Terra has already done, than the at-present-accepted third millennium B.C.

The discoveries of Dr. Andersson at Sha Kuo T'un in Fengtien which occupy an intermediate place between Japan and China are therefore of capital importance today. In the cave deposits there he found chipped instruments of flint-like stone, polished stone celts, flat stone-rings, mussel shell-rings, stone-discs, animal sculptures, animal and human bones, buttons and beads, bone instruments and artifacts, dwellings, etc., which are paralleled by similar finds from the pre-historic sites of Japan. For years the Japanese scholars have been searching for continental contexts of the Japanese racial types and cultures. Immediately after the Russo-Japanese War Dr. Torii visited (1906) Eastern Mongolia. Mrs. Torii is also like her husband a very competent ethnologist publishing an illustrated volume of over 1,000 pages on *Mongolia from the View-point of Ethnology.* Between 1906-1909 Dr. and Mrs. Torii investigated the culture of the Kitan races, and published, in the *Journal of the College of Science* (1914-15) of the Imperial University of Tokyo, two very important monographs in French : *Populations Primitives de la Mongolie Orientale* and *Populations Pre-historiques de la Manchourie Meridionale.* Now Dr. Torii is engaged in writing the final results of his 30 years' research in a big volume published under the auspices of the Academy of Oriental Institute, Tokyo. In his work, Dr. Torii is helped by his son who is a photographer and also by his daughter who ever since she was fourteen, acted as her father's assistant, and in 1934 Miss Torii was sent abroad doing research under Dr. Roy Chapman Andrews and Dr. Neil C. Nelson of the American Museum of Natural History, New York, where she examined their splendid Mongolian collection.

Dr. Torii is of opinion that the pre-historic finds of Japan described so far are not of the Paleolithic but of the Neolithic Age when the country was occupied by an aboriginal people who may be called Proto-Ainus, if not the Ainus as actually known to us. They are to be found all over the country from Okinawa to Hokkaido. They used weapons of stone-axes,

chisels, scrapers, arrow-heads, spear-heads of stone and sometimes of bone. Their culture was very rich in pottery materials : specially valuable being the clay images indicating the dress, manners and customs of those days ornamentation, tatooing, head-dressing, use of vermilion and bone-combs, necklaces of bone and stone, bracelets of shells which are so common also among the aboriginal races of Asia. There is a common feature in their vessels and among the decorative motifs we find the coiling as well as geometrical lines. These Proto-Ainus, therefore, were far from being uncivilised, and they were a distinct ethnic type with profuse hair on their head and face, so different from the average Mongoloid Japanese. In fishing, their main occupation, they used the bone-harpoon; and their pit dwellings point to a resemblance with the ancient peoples of North-eastern Asia like the Chukchi, the Koryaks, the Aleuts and the Eskimos who are now known to be the progenitors or cousins of the American Indians. Their culture called " Paleo-Siberian " is characterised by coiling patterns on earthen vessels and images almost all females (male images being very rare) and therefore belonging to some mother-goddess cult. These characteristics are very rarely found in the neighbouring countries of Japan like Korea, Manchuria, Mongolia, Siberia and China on the one hand and in the South Sea islands on the other. Possible traces, however, are found in Shantung and at Gladekow in the Maritime Province but these Proto-Ainu people now seem to be an isolated folk like the modern Ainus and the Gilyak of the Amur River delta. Some of their vessels are compared by Joyce with those discovered in the shell-mounds of New Guinea, though there might have been no connection. But an intriguing problem, that of curly hair in the Japanese island of Kyushu, has been explained partially on the hypothesis of contact with the Indonesians such as the Hayato who migrated into Japan when they had already received Negrito blood. This Indonesian connection with prehistoric Japan should be studied with the Malayo-Polynesian theory of their linguistic origins.

Before the end of the neolithic age, there was superimposed, on the aboriginal Proto-Ainu culture, the pre-historic culture of the Japanese proper. The remains of these ancient Japanese folks are distributed widely all over Japan, being more abundant in Kyushu, Chugoku, Kinai and Tokaido. They appear to come from a mixed stock, and although they were different from the earlier aborigines, yet they showed bone and stone implements and pottery of the same type. A striking difference is seen, however, in a new phenomenon—the appearance of the *megalithic* monuments : tumuli, cairns, dolmen-like stones, menhirs and stone circles just as we have discovered in

Hyderabad, Deccan and in other very old rock formations of Eastern India and Assam. Japanese mythological legends and early literature also conserved the memory of the circle of stones (*Iwasaka*) erected around the spot where a god was worshipped. While using the same Proto-Ainu type of weapons, and implements of stones, these pre-historic Japanese people made a highly original kind of pottery shaped like a basket with basket patterns, ornamented with coiling designs and with a huge handle attached. They did use a crude sort of a wheel enabling them to make the vessels symmetrical in shape. The coiling pattern is rarely used and the general design is very simple often with no pattern or only a few geometrical combinations. By occupation these peoples were hunters and fishermen, who gradually learnt the art of agriculture; and then a new element came from China (North and South), most probably through Western Korea. With the absorption of new elements there developed the proto-historic (*Jodai*) civilisation as against the pre-historic (*Shindai*) culture.

These people, organised in clan system, worshipped their guardian deities, the gods of the clans as well as the gods of sea and river, wood and mountain. But the natural objects were never deified. The service of the gods was the special privilege of the priests and the priestesses (sometimes called witches or *miko*) which seemed to prove that it was a sort of Shamanistic religion common to the Ural-Altaic peoples of Northern Asia and Europe. The Shaman or the priest alone could communicate with the unseen world of gods, demons and ancestral spirits, and they used mirrors, jingle bells and hemp or paper pendants. Originally the Shamans were all women, and even in the reign of the emperor Jimmu, a male deity was presiding over a great festival under the female title of the Sacred Daughter (*Itsu-Hime*). Ancient Japan seems thus to have been under a religious matriarchate. From now metal implements of bronze and specially of iron became more and more common. But while China specialised in metal casting, Japan forged her metal tools and vessels mainly for ritualistic purposes. Along with the earlier pottery vessels they made now a primitive porcelain *Sue* which entered Japan from China with the Chinese immigrants. The baking was good but the art of glazing was still unknown. In sword-making the Japanese of the period displayed fine workmanship. Swords were necessary to defend their rich agricultural lands growing rice and millet. There were plenty of game and animals in the mountains, and fish, oysters, etc., in the water. Silk was introduced from China and hemp was grown for clothes. Horses and cattle were domesticated and decorated with gold or cast-copper ornaments. Gold and silver rings of exquisite crafts-

manship have been compared with similar specimens of Scythian and Sassanian models. Mirrors imported from China came to be much favoured, specially as ritualistic objects. The domestic dwellings were made of wood, erected high above the ground upon pillars, with thatched roofs.

The disposal of the dead within a stone coffin in chambers of stone or clay is interesting. The tombs often were much more imposing than the dwelling houses, and here the ancient Japanese reminded us of the Egyptians burying the dead in their formal attire together with their belongings and retainers who were killed or urged to commit suicide, just as we find in the Honan tombs. Later on, clay figures were substituted for living men, as we saw in the age of transition from the Shang to the Chou culture. Their weapons and armours testify to considerable progress in smithcraft. Huge forged swords of bronze have been discovered in the north of Kyushu, Chugoku and Shikoku, but these being ritual objects and no other bronze implements being found on a large scale so far, scholars do not admit that there was a Bronze Age in Japan as in China and elsewhere. The *Dotaku* or the bronze bell was used for religious purposes, and according to Dr. Torii it might have Southern Asiatic origin, for it reminds us of the *doki* or bronze hand drum which is used by the tribes of South China, Annam, Siam and Burma. So Iron Age immediately followed the Stone Age in Japan, and we know that the Age of Iron in South India and some other parts of Asia was much higher than the European Iron Age.

The Archaic Art of Japan

The valuable informations supplied by Dr. Torii have been supplemented by another noted writer, Noritake Tsuda, a former lecturer on Fine Arts in New York University. In his *Handbook of Japanese Art* (Tokyo, 1936), he described two distinct types of neolithic pottery with characteristic designs and decorations : (1) The *Jomon-doki* pottery with angular edges and handles modelled into various forms of animal heads. Such a vessel is to be found in the Tokyo Imperial Household Museum amidst the Ainu pottery collections. The ground surface in dark grey colour gives the impression of a mat, and the designs are curvilinear. (2) Another kind of pottery of a later age, the *Yayoi-shiki*, is reddish in colour and with few designs except wavy lines and zig-zags. While the earlier pottery is richer in decoration, the later one is striking in the originality of form, and therefore the two types may be of two distinct cultures of different epochs. The valuable prehistoric pottery objects are deposited mostly in the Imperial Household

Museum, the Institute of Anthropology of the Imperial University and in the Prince Oyama Institute of Pre-historic Investigation, Tokyo. The museums of Nara and Kyoto as well as the Institute of Archæology, Kyoto Imperial University, also exhibit valuable collections.

The burial mounds of ancient Japan have yielded a good deal of proto-historic pottery, never glazed or painted, and made partially or entirely on the potter's wheel. The decoration is very simple and rude, scratched in the clay when soft with pointed tools or with combs. They show on the shoulders of vases, the figures of men and animals and birds. Another interesting series of mortuary figures of men and women in coarse red terra-cotta offered valuable models illustrating the manners and customs of proto-historic Japan. Other animals like birds and horses as well as house models may be intended for the services of the dead.

From Bronze Age to Yamato Culture

The Bronze Age in Japan was so short that many scholars do not admit its existence as a distinct epoch. Bronze objects like arrow heads, *kris*-shaped daggers, *dotaku*-bells, etc., were found in the limited area of Yamato, Izumo and Northern Kyushu. They mark, according to Mr. Tsuda, "the intermediate state between the art of the new stone age and that of the proto-historic period." The largest number of *dotaku*-bells is found in the Yamato province, which is the central sphere of early Japanese culture; and though the art of casting the bell may have been derived from China yet its designing with fin-like border and decorative knobs running down the side is considered to be original to Japan. Pictures of contemporary life are represented in relief on the *dotaku*-bells—hunting scenes with bows, and deer, boating and fishing, agricultural activities, styles of architecture, dolls, etc., are depicted on the bronze reliefs.

After the short Bronze Age, the Iron Age of Japan followed continuing down to 552 A.D. when Buddhism was first introduced into the court of Japan. Before that there was no organised religion except the cult of ancestor worship or Shintoism based on a patriarchal national policy. While the principle pursuit was agriculture, there was differentiation of crafts into various hereditary industrial guilds, as in India, of potters, and leather-makers, weavers of cotton, spinners of silk, copper and iron workers, forgers of arms and armours (which they decorated with guilded and incised patterns). Thus the Japanese people were very advanced in the technique of iron working as well as in the casting and gilding of bronze

objects like mirrors, horse-furnishings and personal ornaments. They excelled in working in precious stones, and could even manufacture white and blue glass. The proto-historic swords are perfectly straight, with only one cutting-edge, while curve-swords were fashionable in later times. Some swords are richly ornamented with bosses in *repoussé* work. The armour is usually made of iron, resembling the armour on the terracotta figures, but very different from that of later historical times. A type of scale armour is also represented on the burial figures. Helmets of iron or bronze are very rare. The signs of the Zodiac finely chiselled is found on a bronze helmet. The most important relics of metal are the horse-trappings decorated with inlaid designs, sometimes coated with gold. That the Japanese of this proto-historic age were in close cultural relations with China is conclusively proved by the discovery of bronze mirrors reflecting clearly Chinese design, mythology, religion and folk-lore. Numerous examples of the Han mirrors (now in the Tokyo Imperial Museum), found in Japanese burial mounds, help us to ascertain the epoch of this intensive artistic exchange. The four sacred animals of the cardinal points are often represented : the Dragon of the East, the Tiger of the West, the Bird of the South and the Tortoise embraced by a Snake of the North. Ancient Chinese deities like the Queen Mother of the West and the Father of the East, and the Chinese symbol of the Land of Everlasting Happiness, are also represented; their designs and inscriptions remind us strongly of the Chinese bronze-mirrors of the Han epoch gradually degenerating into the style of the Six dynasties.

Personal ornaments consisted of rings of copper or bronze wrought in gold or silver. There were also various kinds of beads of stone and glass. The *magatama* or curved beads made of rock crystal, steatite, jasper, agate, nephrite were most important of the ancient stone ornaments. The *kudatama* or tube beads were less common and made of well-cut polished cylinders of jasper of a fine green colour, and different shades of colours were produced by different styles of polish to suit the tastes of the people. It is significant in this connection to note the valuable evidences adduced by Dr. Laufer in his learned monograph, *Chinese Pottery of the Han Dynasty*, where he discusses the influence of Siberian or Turanian art and culture on ancient China, and through China on Korea and Japan. Han bas-reliefs (about 1st century A.D.. *vide* Chavannes : *La Sculpture sur pierre en Chine*, 1893) are found on the hill of Hsiao T'ang Shan in Western Shantung, a province which is known to have connections with pre-historic Japan. It is not a matter of mere coincidence that the oldest document (traced so far) regarding Japan is the Chinese " Annals of the Later Han Dynasty." There it is

recorded that the men and the women " are not separated (as in China) when taking meals, they eat with their hands, and make use of the *pieu* and the *tou*." Now in ancient Chinese books we find mention of the following types of sacrificial vessels : (1) The *tou* made of wood, (2) the *pieu* made of bamboo, and (3) the *teng* made of pottery.

These three types of vessels are still used in the Chinese worship of Confucius, and these vessels connect ancient China with pre-historic Japan and Korea, as we find from the following story. The last emperor of the Shang-Yin dynasty fell into evil ways, so his nobles protested, and one of them, Chi-tzu, who was imprisoned by the degenerate emperor, was released by the victorious founder of the Chou dynasty. Honoured as a Chou officer, Chi-tzu retired to Korea in 1122 B.C. He began to civilise the Koreans with Chinese philosophy and culture, and taught the men and women of Korea to take their food and drink from the vessels *pieu* and *tou*. The above, as we have seen, came to be used by the Japanese people also in the Han period, when Japan was connected intimately with Korea and through Korea with China. Recent excavations in Korea revealed that important Chinese colonies existed in Lolang, Nakniang, Rakuro and other places since the beginning of the Great Wall in 239 B.C. From 100 B.C. to 200 A.D. Chinese influence in Korea was considerable and continuous, and gradually the influence extended to South Korea and Japan. It was during this period that Kumaso (later Hayato) and Idzumo folks conjointly effected the eastward conquest about 1st century A.D. Their capital was at Yamato, and the three centres of Yamato culture were Kyushu, Yamato and Kanto. Dr. Torii also, in his Japanese monograph *Yushi izen no Nippon*, connects the Yayoi culture of Japan with the adjacent continental culture.

Thus the peopling of Japan *via* Shantung and Korea and also across the Yellow Sea is generally accepted, and it might have originated with the great racial movements (from the West to the East) stimulated by the Chou conquest of the Yellow River basin. This Japanese race proper must have met the aboriginal people the Ainus and the Proto-Ainus, and that the two mixed their blood is partially testified by the Tsugumo race suppossed to be the common ancestors of the Ainus and the Japanese. The origin of the Ainu (Yemishi), however, is enveloped in mystery. They are supposed to have come in three migratory waves *via* Sado and Echigo, and the three subtypes known to-day are Hi-no-moto, Karabito and Watari. They represent a very old generalised human type continuing the neolithic culture. Their language is isolated—it is sometimes linked with the pre-Dravidian or Austric of India, and sometimes with the language of the Australian natives

who came in contact with the Black races very early—and a Negrito element with curly hair is also traceable in some folks of Japan. This led to the formulation of the Malayo-Polynesian theory in explaining Japanese race-origins. They are supposed by the champions of this Oceanic Theory to spread out from Indonesia or South-eastern Asia as a branch of the Malayo-Polynesian race which reached as far east as the Easter Island and as far west as Madagascar. Some scholars believe the South-eastern Asiatic race to be mainly Mongoloid, the Polynesian diffusion not taking place until after the emergence of the Japanese. The Malays may be contemporary with or a little later than these Japanese. However, all these factors have got to be kept constantly in view while we enter into the study of Japanese archæology and art. While working at the Oriental Institute of the University of Hawaii, my attention was drawn by my Japanese colleagues to a recent book by Hideo Ohba who published in 1934 his "Outline of Japanese Archæology" (*Nippon Koko-Gaku Gaisetsu*). The book unfortunately is not yet translated, but thanks to the kind courtesy of a Japanese friend, I give here a very brief outline of his treatment. After a few general discussions on archæology the author examines in detail the Jomon-doki and the Yayoi-shiki pottery strata together with the dwelling ruins, the cemetry mounds, the ceremonial ruins, the relics of pre-historic industry : stone, clay-seals, bones, horns, teeth, shells, lacquer materials, copper and iron. He next examines the antiquities of the Mound-period connected with dwelling houses, ceremonials and primitive industries. In the concluding chapters he attempts to read ethnic or national characteristics in the various relics, and further to give a chronological sequence in three successive stages : the Jomon, the Yayoi and the Mound phase of culture.

The difficulty of presenting an adequate picture of pre-historic Japan lies in the fact that most of the original papers, excavation reports, etc., are published in the Japanese language. As early as 1879, we find that the Memoirs of the Science department, Tokyo University, published a paper by the American scholar Edward Morse on the "Shell-Mounds of Omori." Individual scholars have contributed valuable articles on Japanese pre-historic culture, archæology, anthropology and philology appearing mostly in the *Transactions and Proceedings of the Japan Society*, London and in the *Transactions of the Asiatic Society of Japan*. The latter published (1882-1932) a series of articles by John Batchelor, an authority on Ainu culture. From 1890 the United States National Museum in its reports had published several articles on pre-historic Japan. Most of these materials were utilised by Dr. Neil Gordon Munro who published the first compre-

hensive survey in his *Pre-historic Japan* (Yokohama, 1911). The manuscript was complete in 1908 but unfortunately was destroyed by fire and it could not therefore be printed before 1911. Since then heaps of new materials have accumulated but in the absence of a systematic stock-taking we present below, for the benefit of our readers not having access to Dr. Munro's volume, a general outline of his study on Pre-historic Japan. A few crude stone-tools were discovered by Dr. Munro in the basin of the Hayakawa which he tried to correlate with the bones of the Tertiary mammals found in gravel as described in the *Outlines of the Geology of Japan* published by the Imperial Geological Survey of Japan. During the Tertiary epoch, Japan like Java was connected with the continent of Asia. The discovery of the Java Man (Pithecanthropus erectus) followed by the tracing of the home of the Peking Man, already living on rice, has led some scholars to link up these two very ancient and rare types of fossil men whose cousins may very conveniently lie in some parts of Eastern Asia undetected as yet. But most of the scholars are still sceptical with regard to the correlation of the Japanese stone tools with any palaeolithic strata. They agree, however, so far as to their neolithic context, and over 4,000 such sites have been discovered. Specially numerous are the sites in the Kwanto provinces in Northern Japan where we find a later culture. The thickness of the shell-heaps (*kaidzuka* or kitchen-middens) varied from one to twelve feet. They contain animal bones, broken pottery and discarded stone tools. Human skulls found with broken pieces of pottery may suggest some sort of jar-burial.

The neolithic inhabitants of Japan lived in very simple huts during the six or more months of warm weather, but in the cold seasons many of them used pit-dwelling of the type found in Korea and Formosa and which still survive amongst the *Eta* folk who were the former *pariahs* of Japan and who resemble in many ways the Ainus of the Kurile islands. The present Ainus are the last descendants of a race who were not much inferior in culture to the invading Yamato race, who learnt agricultural arts from the *Yemishi* or *Yezo*, meaning, ' Outsiders ' or ' Barbarians,' who still occupied a third of the mainland (Honshu) as we know from the early Japanese chronicle the Kojiki compiled about 712 A.D. Dr. Torii inspected some of these pit-dwellings in the Kuriles in 1899. He also described the transition between the underground pit-dwellings and the huts erected above the ground in which no nails were used and the poles were tied together in a primitive fashion. The Ainus practised agriculture rather crudely, using hoes frequently made of wood. The tools and devices for fishing, hunting and

capturing animals for food attest to the various means of livelihood, and the distribution of the neolithic remains on the islands around Japan proves that the primitive peoples used boats large enough to traverse fifty miles or more of open sea. These boats were hollowed out of logs (like the *dongās* and *sāltis* of Bengal), and may have been partially skin-covered.

The Ceramic Art

Abundant pottery materials are found in the North of Japan, and as we proceed to the South-West they become less abundant as also the primitive sites. The materials of the primitive pottery is a coarse clay tempered with sharp sand or particles of quartz or pebbles. They are generally imperfectly baked, and the thinner vessels are sometimes uniformly fired and therefore superior to the Yoyoi-shiki or intermediate pottery. The Northern pottery is occasionally covered with a slip of finer clay. The colour usually approaches that of terracotta with varying shades running into grey, dark-brown or black. Many of the vessels were made by coiling, and coiling appears as a conventional decoration. The bottom of the vessels often retained the impressions of the matting which was intended to prevent movement during moulding, and the use of the potter's wheel is beyond doubt; some of the cooking pots, pans and bowls appear as finely moulded and decorated. The jars and vases often exhibit textile decorations. Characteristic Ainu patterns are found also on bowls, dishes, cups, bottles, lamps, braziers, incense-burners, etc., in the famous Takashima collection, which shows striking nipple-pots or drinking vessels sometimes in quasi-human shape. Some shallow bowls with heavy pedestals are found in the Shinto ritual as a survival of a more ancient culture. Some such types of handmade potteries are found in Pre-historic Japan as well as in India, Greece and elsewhere. Among the minor objects are a few strainers, and clay objects for stamping designs on cloth. Some earthenware plaques are distinctly anthropomorphic, and probably connected with the clay images which are found in abundance.

These clay images were not intended to produce an all-round likeness, and most of them are highly conventionalised. The female figures greatly outnumbered the male, and they were mostly found in residential sites and not in the burial grounds. Most probably those were the effigies of the dead worshipped for the well-being of the living. Some of the images are quit nude, and some provided with a loin-cloth which, however, do not conceal the sex. The disproportionately large eyes remind us of the eye-designs depicted on the junks of China and the boats of Polynesia. There

is comparative absence of sexual motif on these figures, although the phallic symbol is common on the *seki-bo* or stone-club. The makers of the clay images (*Dogu*) attached great importance to personal ornamentation like hair-dressing, tatooing, and use of beads and earrings. Though a certain degree of nudity is the rule rather than the exception (as in India), the figures are seldom without some decorations, which often serve the purpose of dress. The Yezo Ainu trace the art of tatooing to the *Koropok-guru* or pit-dwellers. But Kurile Ainus attribute the practice to their ancestors, as it was ascertained by Dr. Torii. Among the minor objects may be mentioned the neolithic *magatama* which serve as the model for the later Japanese *kudutama*, both deriving their form from the claws of the tiger which animal was deified in Korea. So its tooth or paw enjoyed great reputation as an amulet. In many such cases one must compare the ancient patterns and designs with those still lingering with the Ainu people, as has been done by D. Sato and S. Sato, who made a splendid collection of their own. But we must always remember that Pre-historic Japan was connected with Korea, Manchuria and continental China, and that makes the task more complicated and thus comparative study becomes indispensable.

Transition from the Primitive to the Intermediate Pottery

Pottery designs are the most valuable indices for determining, if not the exact chronology, at least the sequence of the cultural strata. In the earliest potteries of Japan we find that designs in colour are rare, and if they occur at all they are very simple, geometrical patterns like the triangle and circle to emphasise low relief. Red, white, black, or dark-grey and brown are the colours generally used. A thinner type of pottery shows some kind of polish, and warm tints like red and pink with an occasional touch of yellow and chocolate are used as the surface colour. Lacquer and red ochre were sometimes used for surface decoration.

Matting patterns, and textile impressions are frequently seen, but the most common are patterns produced by engraving or incision. Quite a large variety of beautiful designs emerge out of the combination of the engraved and the relieved patterns; but the art of pictorial composition is rarely practised on clay as in the case of the possible representation of the Ainu myth (shared also by the Japanese and the Russian folk-lore) where the world is shown to be on the back of a fish. Lizard design seems to occur in some cases. On the ornamented handles of the primitive vessels, the bird, boar, snake and such animal motifs are found. These primitive

patterns are largely conserved in the Ainu designs on wood, bone, textile fabric and skin. While differences are admitted, yet the similarities are more significant. The Ainus may or may not be ethnically connected with the primitive races of Japan, but there are many proofs of cultural contact.

Between the primitive and Yamato pottery we notice an intermediate type found in shell heaps and sometimes associated with stone tools. This is known now as the Yayoi type, distributed throughout Japan from south to north. They are sometimes found associated with Yamato relics like the Haniwa pottery. This pottery is not turned on the wheel and is therefore connected with some neolithic ware, though the paste is thinner and more uniformly baked than most of the neolithic pottery. Combs of bamboo or other materials were used to scratch patterns on the surface of the clay before drying. The lines of the intermediate pottery are sometimes crossed, thus producing textile designs which are seen on the primitive as well as on the later Yamato pottery, specially the triangular and quadrangular patterns. The decorations on the intermediate pottery are generally very subdued and sober, with occasional attempts at moulded decorations. Leaf designs appear now and then, and most of the unglazed pottery which cannot be identified with the primitive or the Yamato type may be accepted to belong to the intermediate variety which approaches the primitive in its paste and the Yamato in its pattern, as has been studied by Dr. Munro in the Minamikase shell mound. Some unglazed terracotta is found to be turned on the wheel, while in other hybrid potteries we find them partially wheel-made and partially hand-made. The intermediate pottery was connected with the later Yamato culture, for they appear in the burial caves, cairns and tombs. The primitive potters of Japan were usually women; and in the epoch following the primitive culture, this intermediate type of domestic pottery was probably evolved out of necessity by cruder artisans and their works were generally not used for burial whenever the classical sepulchral pottery were available for offerings of food or wine to the ancestral spirits. Some of the intermediate pottery types are said to approach the Malayan pottery, and recently, since the discovery of the Indus Valley Civilisation, the Indus type came to be compared rather indiscriminately with the so-called " Ainu Pottery," meaning the primitive pottery of Japan.

Proto-historic Yamato Culture

The ethnic type which finally emerges as the Yamato or Japanese proper is, as it is admitted, a mixture of several distinct stocks. The most primitive

aborigines may be called the proto-Ainus, a proto-Caucasian race who came to be modified by mixing their blood with the Mongoloid races reaching Korea and possibly Japan in the first millennium B.C. when China was under the Chou dynasty. Next we notice certain Negrito characters which might be explained by the contact of Japan with Indonesia, where the Mongoloid, the Negrito and the Caucasian (Indian) element were fused to form the Malayan tribes who were supposed to have left definite traces in the island of Kyushu. These immigrants from Malaysia belong probably to the Stone Age, for the bronze weapons found in Kyushu have no affinity with the Malayan culture; on the contrary they are derived from some continental (Sino-Korean) contexts. The broad-headed Negrito type was probably modified by Indonesian or Mongolian elements before its arrival in Japan, as we find in the case of the Igorrot of the Philippines, which archipelago, situated midway between India and Japan, possibly recapitulated the same process of racial fusion. The agricultural population of Japan is reported to resemble the Igorrot, but they represented the lower classes of the primitive Japanese society. The conquering class was partly Caucasian and partly Mongoloid, forming the aristocratic type. Japan was thus the converging point of several ethnic and cultural migrations from the Indian Ocean and the Pacific. Many of these pre-historic features were continued through the proto-historic to the hisoric days by the highly gifted Yamato race, the real makers of Japan. The Yamato culture is associated throughout Japan with the intermediate pottery forming, the ordinary household wares of these people. This pottery is marked with comb designs and was probably made by the Haniwa potters. For religious or ceremonial purposes they used the classical *Iwaibe* or sacred vessels which are sub-divided into Koreans and Japanese types. We know definitely that China in the glorious Han epoch transformed the cultural life of Korea and Japan; and therefore the establishment of Yamato power might have synchronised with those movements. The *Han Annals* of the beginning of the Christian era refer to the Japanese in these terms : . "The soldiers have spears and shields, wooden bows and bamboo arrows which are sometimes tipped with bones." These primitive arms were soon improved by the Japanese who, as we have seen, were experts in using metals like bronze, and specially iron. Korean was probably the first to import these techniques of higher culture from China, and we know that by the 5th cenury A.D. the Koreans adopted the Chinese script, which also stimulated the development of the earliest script of Japan.

The classical *Iwaibe* vessels whether Korean or Japanese are sharply distinguished by their simple and restrained decorations as against the highly

ornate embellishments of the primitive pottery. But they are uniformly baked, and much harder than the primitive wares with finer paste. Bowls, dishes, cups, jars, bottles, flasks and drinking vases of different types have been collected and carefully preserved in the Imperial Household Museum and in the University of Tokyo collection. Sometimes human or animal figures in relief are introduced, and occasionally a large jar has several small jars added to its shoulder forming the *Komochi* or 'child-bearing decoration.' Survival of the ancient water-skin model appears now and then in Japanese jars. Spouted vessels for libation or drinking resemble those found in ancient Persia, India and in the Sumerian pictographs. The leather-bottle forms, well known from China to Egypt, were also imitated by the Yamato potters.

The decoration consists of textile designs, circular and triangular patterns or those composed of lines and dots together, with very sparing use of figures in high relief. Horse, deer, wild boar, dog, bird, tortoise and human figures are seen moulded on the shoulders of the vases. A special type is represented by the Haniwa, consisting of cylinders of coarse terracotta. These are surmounted by human or animal figures and rarely by inanimate objects. It is connected with the intermediate pottery and other specimens of unglazed terracotta found in the Yamato tombs. Holes are usually seen in the sides of the cylinders which were probably intended for fixing them as ornamental adjuncts to the tumuli. The human figures surmounting the Haniwa are of different types, and sometimes there is a suggestion of the raised hands in ceremonial attitude or as a form of salutation. The earrings are common, so also the necklaces and combs. The water-vessel is shown carried on the head, and a female figure is robed in a long gown with close-fitting sleeves. So, iron armour, leather protection for the body strengthened by metal plates and metal helmets, are also shown as decoration on these terracotta figures which resembled more the Caucasian than the Mongolian type. Figures of swans, horses, hares and boars have also been found probably influenced by the Han pottery figures. The most important inanimate object represented is the arm-guard Tomo designed to enhance the sound caused by the impact of the bow-string in its recoil. The Yamato pottery, therefore, is the most valuable link connecting prehistoric Japanese art with the arts and crafts developing in the historic period inaugurated by the introduction of Buddhism in 552 A.D. from Korea and China.

II

Japanese Art and Religion

WITH some people like the ancient Hindus, the development of religious life and belief could be traced through literature. But even in India a good deal of the evidences relating to the arts and rituals of the pre-Aryan and the pre-Dravidian peoples had been lost because of the paucity of literary records. Fortunately for China, the discovery and decipherment of the Oracle Bones have helped in unravelling the mysteries of ancient Chinese religion. But Japan is less fortunate and has lost, through oblivion or fusion with later cults, many of the primitive religious beliefs and customs because they were never recorded in literature. The modern sciences of comparative mythology and religion, however, are helping us to reconstruct partially that ancient and half forgotten history, suggested by the indigenous institution of Shintoism. But as it came to be influenced very strongly by the double, spiritual and cultural, currents from China and India, even modern Japanese experts on Shintoism find it difficult to disentangle the autochthonous from the extrenuous elements. Prof. K. Mizoguchi in his recent *Study of Shintoism* admits clearly that the term " Shinto " appears rather late in the reign of the thirty-first Emperor Yomei, and it came to be used as a philosophical expression only as late as the Kamakura period (13th century). However, in the hey-day of Yamato culture, when Japan was already impregnated with Chinese religious beliefs and Indian Buddhism, some attempts were made to conserve and characterise the positive contents of Shintoism in two classical texts compiled between 681 and 720 A.D.—the *Nihonshoki* (the Chronicles of Japan) and the Kojiki (Records of Ancient Matters). But already the ancient myths and legends are found to be distorted and often amplified by new things imported by oral tradition. But because the two ancient chronicles are regarded as the bibles of Yamato spirit, they are of considerable importance explaining the religious faith and racial spirit of old.

In the pre-Buddhistic days the people worshipped their Gods and respected the Emperors as the descendants of the Gods who ruled them according to the precepts of their Ancestors. Of this Triad, the Gods in the plural suggest that many pre-historic and proto-historic deities came to be assimilated into the Yamato pantheon. So the Ancestor cult may have been influenced by the Confucianism of China. The Emperor-concept may

also have been developed in Japan through her relations with Chinese imperialism of the Chou, the Ts'in and the Han dynasties. But the Japanese Emperor-concept was something rooted to the soil. This became clear when the interpretations of Shintoism from the Confucian, the Taoist and the Buddhist point of view was superseded by the assertion of the national stand-point with the publication of the *Jinno-Shotoki* or the True Successions of the Divine Emperors written by Chikafusa in the 14th century. There it was stated clearly that Japan was founded by the supreme goddess Amaterasu Omikami. She is the ancestress of all the emperors who governed Japan as her " Divine descendants from generation to generation according to Her principles. " This was further emphasised by Kanetomo, a scholar of the Ashikaga period who recorded that " although there were numerous gods, yet the Way of the holiest deity Amaterasu was the only one and was free from all influences of Confucianism, Buddhism or Taoism, as it had been cultivated purely on Japanese soil."

The compound word " Shin-to " is of Chinese origin meaning " the Way of the Gods." The native Japanese equivalent of *Shin-to* is *Kami-no-michi.* It includes not only the worship of the ancestral spirits but those of nature and abstract deities as well. Some degree of fetishism must also have come down from the proto-Ainu aborigines. There is no definite counterpart in Japan of the Chinese *Shang-ti* or the Supreme Ruler. His place is fulfilled by the great Amaterasu or the heaven-shining deity who is the mother of Sun Cult of Japan, probably derived from the Vedic, the Chaldean or Iranian solar cults, which, with the migration of the Indo-Polynesian races, possibly entered Japan and the Pacific world. Dr. Munro has instituted a close comparison between Amaterasu and the Mithra legends. Many Western-Asiatic and Indo-Iranian analogies are suggested by the Shinto myths and ritual. Reeds are mentioned in the Babylonian cosmogony, and Moses was placed on a bed of reeds. So some of the early Shinto gods were produced from the reed-shoots and these are the gods worshipped in the famous Ise shrine where ritual fire is still produced by friction as in Vedic India. The fire cult is also a common element, and the horse had equal symbolical meanings in the sun and fire cults of Shintoism and Vedic India. The heavenly horse was flayed by the storm god Sosa (Vedic Marut) and thrust into the weaving hall of Amaterasu, suggesting some kind of horse-sacrifice. These have been discussed in detail by Aston in the volume on " Shinto." The next important element is the Worship of the Departed Soul which lies at the root of the Japanese religion. This is considered by Dr. Munro to be rooted in primitive fetishism and he significantly refers to

the anthropomorphic images (*dogu*), both in stone and wood, coming from the primitive sites which form a connecting link between the ancient fetish worship and the ancestor worship of the later Yamato people. Some of the figures retain only the upper limbs, sometimes only the head. So the phallic symbol is clearly seen on the Sekibo worshipped by the Yamato people who may have derived it from earlier races. There is no doubt now that many primitive cults came to be amalgamated with the later Yamato cults. Dr. Munro agrees with Rev. Batchelor, the leading authority on the Ainu culture, that the Japanese derived the word *Kami* from the Ainu word *Kamui* which also means 'god.' So the Yamato, like the Aryan conquerors of India, adopted from the conquered aborigines the phallic emblems and the fetish of clay figures to ward off the evil spirits and other troubles expected from a hostile surrounding. Protection of roads and fields and against maladies were the main functions attributed to these pre-historic deities. Stone circles or cromlechs and standing stones are almost unknown in Japan. But there are references to them in the early chronicles, and here and there upright stones are being discovered with primitive pottery. So from the dim pre-historic past, ancestor-worship came to be associated with cannibalism which lingered in Japan. Living inhumation at the funerals of emperors and suicide at the funerals of feudal chiefs are probably vestiges of primitive human sacrifice. Many such evidences go to establish the continuity of the Northern Yezo with the Ainu of the present day who sacrifice the bear for the services of the greater deity, just as human beings are sacrificed for ancestral or other gods. Ancestor-worship in Japan is not a state religion. It is the religion of the hearth and home. But it is the source of all the beliefs that are classed to-day under the name of the Shinto. Its unwritten code regulates the conduct of successive generations, and so deeply rooted is this faith that even Buddhism could not supplant it.

Social Background of Yamato Culture

Those who consider that the historical peroid of Japan opens with the introduction of Buddhism would consider the first five centuries of the Christian era as proto-historic. This pre-Buddhistic Yamato culture is fortunately conserved to a certain extent in three important compilations. The *Kojiki* was translated by Chamberlain; the *Nihongi* was translated by Aston, and besides these two historical chronicles are the fascinating court poems of the *Manyoshiu* anthology partially translated by Dickins. From the matter of fact and often coarse presentation of life in the *Kojiki*, that book seems to

represent the more primitive aspect of Yamato culture. In *Nihongi* the treatment is more refined, while in the *Manyoshiu* poems we taste the almost hyper-sensitive feelings of an over-refined court life. Sociological and cultural deductions from these literary classics have been made by several scholars like Prof. Florenz and Ernest Satow analysing the Shinto rituals, and also by K. Asakawa, author of " the Early Institutional Life of Japan." Chronologically speaking, most of the material details in the above three classics belonged to the centuries previous to 720 A.D. when Buddhism was well established in Nara. In the very heart of that magnificent temple city, there have been discovered store-houses and shrines erected on posts, thus continuing the Ainu type of buildings. Houses built partly on piles and over-hanging the shores of the lakes and rivers may still be found. For child birth, they had a special chamber resembling the primitive *Mura* or pit-dwelling. So there were special nuptial huts suggesting the cult of ceremonial impurity. A very characteristic structure is the *Inaki* or fortified granary. Rice was not only the staple food but a form of currency and the medium through which the bulk of the taxes was levied, just as it was the custom in India, Chaldaea and Egypt to have payments in grain. Hence " rice-castle " was important in the economic history of ancient Japan.

As regards dress and dress-materials, we seem to notice two distinct traditions. The Haniwa figures show dresses with tight-fitting sleeves and arms possibly bare and with legs encased in something like stockings and breeches. Silk culture was probably indigenous, though the common dress material was made of hemp and from fibres of creeping plants. Beating cloth-fibre as in Polynesia is mentioned in the *Manyoshiu* and the manufacture of cloth from the bark of the paper-mulberry seems to remind us of the Polynesian bark-cloth *tapa*. Between 690-693, which marks the beginning of the historic era, we notice a few sumptuary laws regulating the costumes worn by the different classes. The common people are instructed to wear yellow dress and the slaves black clothes. Caps and hats sometimes resembling helmets, and chaplets or garlands are mentioned. Head-bands, combs, bracelets, ear-rings, etc., were well-known. Several styles of tying or dressing the hair were known, as the terracotta figures clearly show. So tatooing the face and blackening the teeth were probably survivals of ancient customs. The *Han Annals* state that all Japanese males tattooed their faces, and that while the Chinese used rice-powder, the Yamato used red paint to decorate their body. The people have a mixed diet together with the intoxicating *sake* made from fermented rice which made the Japanese already noted for inebriety when the Han chroniclers wrote. Agriculture and

fishing were the chief industries, and to destroy fields or to disturb the irrigation system was considered to be "heavenly sin." Hand plough and metal spades as well as hunting implements show that the people were using metals freely. Fine arts and industrial crafts were imported chiefly from Korea and China. The Koreans taught the arts of paper making. Iron also appeared to have come from Korea to be fashioned into weapons and armours. Copper was called 'the red metal' distinguished from bronze, a special fabric of Korea and China. The first Korean teacher to reach Japan about 385 A.D., was Wani Wang-in who is reported to have introduced the system of writing which enabled the recording of the ancient folk-literature of Japan in a permanent form. Music, dancing and other recreations and games like wrestling and boot-ball were mentioned. Various professions and crafts were organised into hereditary guilds to secure efficiency by specialisation. Such a corporate association known as the *Be* corresponds to the Indian Caste-guilds, and we find a long list of such Japanese guilds for potters, jewellers, painters, weavers, farmers, butchers, makers of arms and armours, court-reciters and scribes.

Some of the arts and crafts suggested by the above guilds were indigenous and some imported from outside. Many scholars agree that the primitive culture came to be displaced by the aggressive Yamato people during the first five centuries B.C. The Yamato culture advanced beyond the Ise-Omi line about the beginning of the Christian era when Yamato dolmens went out of use, followed by the building of the stone burial chambers. These tombs are associated with the Haniwa figures, and most probably during the Han period Japan came to be strongly influenced by Chinese customs and crafts, although still continuing some indigenous or Oceanic social traits like the matriarchate, sister-marriage and so forth. To unravel these mysteries, one must turn to Polynesia and Oceania on the one hand and to the mainland of South-Eastern Asia on the other.

China, Korea and the Continental Context

Prof. Franz Weidenreich of the Peking Union Medical College and a scholar of the Rockefeller Foundation recently expressed the opinion that the pre-historic Japanese may be found to be related to the Peking Man. Some of the skulls discovered in North China were considered to be of the Old Stone Age by the Professor who presented casts of those skulls to the Kyoto Imperial University. That University possesses remarkable prehistoric collections kindly shown to me by the late President Hamada and

Prof. Umehara, both renowned authorities in their respective domains. Coming down from the Stone Age we find that Japan possibly contacted China under the Chou dynasty, and this connection continued with occasional interruption down to the Han period when China was pursuing an aggressive policy of expansion to Manchuria, Korea and beyond. Concrete descriptions of Japanese life and customs are found in the *Han Annals*, and linguistic as well as archæological researches are daily revealing ever fresh materials and evidences proving that Japan and her early historic culture were organically connected with the peoples and cultures of Manchuria and Korea. Eminent Japanese scholars like Dr. Torii and his colleagues have published many papers, but these are sealed books to us because they are mostly written in Japanese. Thanks to the courtesy of the *Kokusai Bunka Shinkokai* of Tokyo and of other scholars of Japan, I could handle, if not the texts, at least the splendid plates with which the Japanese illustrate their books, and I could form some idea of the spendid work done by the Japanese scholars to elucidate the history and the problems of art and archæology of China and Eastern Asia, specially of Manchuria and Korea. Ever since the establishment of the Japanese regime in Korea (1910) and with the Japanese cooperation with the new State of Manchukuo, studies and researches along the above line are developing rapidly. The Japanese archæological missions led by Count Otani and Prof. Tachibana have brought valuable relics from Central Asia, published in several volumes. The sumptuously illustrated Japanese volumes on the arts and antiquities of Korea are unfortunately still inaccessible to us. Several important museums and art collections are to be found in the principal cities of Korea and Manchukuo. But no detailed description of them was available till Mr. Andreas Eckardt published his valuable book : *A History of Korean Art* (1929).

The biggest museum is in the capital city of Korea known as Seoul or Keijo which came to be the capital of the Kingdom in 1394 with the rise of the Li dynasty which lasted for 516 years, under 28 successive kings till Korea was annexed to the Empire of Japan in 1910. The Shotoku Palace built about 1609 is gorgeously decorated, but it is not open to the public. The Shokei Palace dating back to 1483 has been turned into a public museum where one finds valuable specimens of calligraphy, paintings, ceramics and minor arts.

Keishu was the ancient capital of the Kingdom of the Shiragi dynasty which ruled for 992 years (57 B.C.-935 A.D.). During this epoch the great waves of Chinese civilisation from the Han to the T'ang dynasty fertilised Korea. The Shiragi Kingdom was for a long period under Japanese pro-

tection and its first King Kakkyosei is supposed by some as a brother of Japan's first emperor Jimmu, both tracing their descent from heaven. Keishu and its suburbs are literally strewn with historical monuments, stone-carvings, glazed titles, old tombs, cave hermitages and ancient Buddhist statues. Buddhism penetrated Korea in the fourth century A.D. and it helped enormously the development of Korean culture, specially between 913-1392 when the country was under the Korai dynasty founded by Wang who built his capital at Songdo. This capital was shifted to Seoul by King Litan in 1392. But Korea had the misfortune of being repeatedly invaded by foreigners like Chengiz Khan and Kublai Khan. After the fall of the Mongol dynasty and the rise of the Ming emperors, Korea paid homage to the Ming rulers and continued to imitate the Chinese artists of the Ming period. Like them, the Koreans were, generally speaking, devoid of originality, except in the art of ceramics. Like the superb Ming porcelain wares, the Korean ceramic products draw universal applause; and beautiful specimens are treasured in the Victoria and Albert Museum, London, and also in other museums of Europe and America. The Japanese began to raid the Korean coasts in the 16th century, and in 1592 Hideyoshi the Japanese Napoleon temporarily conquered Korea; and although the Japanese were recalled after his death in 1598, yet till the very end of the 18th century Korea was dominated by Japanese influence.

History of Korea before the foundation of Silla Kingdom in 57 B.C. is unfortunately still obscure. Yet both Korea and Manchuria are unexplored mines of pre-historic antiquities, for there is now a unanimity of opinion regarding the penetration (probably compulsory) of the Chinese into Manchuria and Korea during the first millennium B.C. when China was at the end of her Bronze Age. The Chinese sage Chi-tzu is supposed to have settled in Korea about 1122 B.C. with a large number of Chinese emigrants. But long before that the pre-historic Korean King Daukoon is reported to have sent an embassy in 2333 B.C. to the Chinese emperor. But no positive archæological relics of this pre-historic period of Korea have yet been relieved.

The oldest remains so far traced come from Keishu, capital of the Shiragi or Silla Kingdom (founded 57 B.C.) which grew in rivalry with the Kudara Kingdom (capital Fuyo) and the Koli Kingdom (capital, Heijo). Sometimes in alliance with the T'ang dynasty the Shiragi Kingdom threatened to absorb her two rival states. Fuyo has not yet been thoroughly explored, but Heijo (modern Pingyang), capital of the Koli Kingdom (218-1393), has given up many interesting monuments. This city is supposed to be the

original seat of Chi-tzu with whom a large number of Chinese refugees settled in Korea in 1122 B.C. Five and seven-storied stone pagodas and other Buddhist relics have been found at Heijo which came to be the capital (in 247 A.D.) of the Kokoli dynasty which is supposed to have sent their first embassy to Japan in 297 A.D. The foundation of the Kokoli state, however, was in Manchuria about 87 B.C. when after the death of emperor Wou there was a decline in the Chinese regime over North Korea. The Korean art proper, before the intrusion of Chinese influence, may be studied at the tombs in Konan-ri and Kinseki-do and also in the historic sites of Getsu-jo or 'the Half-Moon Castle.' Several such castles were built, specially in the 7th and 8th centuries, to guard against Japanese pirates. Stone monuments, bronze bells with the carving of the " heavenly beings " and other Buddhist objects have been found in plenty. The tomb of King Taiso-Buretsu (644-660) is famous, with its stone tortoise figure, for the King allied himself with the T'ang emperor and by overthrowing the Kudara Kingdom paved the way for the final unification of Korea or Chosen in 668 A.D. The Buddhist influence was so great that in Keishu and its environs only, over 800 Buddhist temples were founded during the reign of King Hoko (513-539). The most important temple is that of Bukkoku-ji the best preserved of the old temples. It was greatly enlarged and richly decorated by King Keitoku (743-765). Its " pagoda of many treasures " of Tahoto is one of the finest stone pagodas of the East, decorated with the rich stone carving of the T'ang period and with Chinese lion and Indian lotus carvings. In a cavern on the sea of Urusan there is a cave-hermitage at the end of which there is a colossal Buddha figure about 10 feet high in a sitting posture. Statues of the Avalokitesvara and attendant deities are beautifully carved on the walls. Many such rare monuments and art treasures have yet to be collected and studied systematically in connection with the art of India and China on the one hand and of Japan on the other. The Koreans belong linguistically to the Southern branch of the Ural-Altaic family and therefore, resemble the Japanese, as Aston attempted to show in his " Comparative Study of the Japanese and Korean Languages " (London, 1879). Other scholars try to link it with the Tungusic (Turkish) dialects, or even with the Dravidian. •The phonetic arrangement of the Wuman alphabet (formed in the 15th century) resmbles the Tibetan and Sanskrit partially.

MANCHURIA

The influences of the Turkish races on Korea and China are well-known, and we follow the same trend in the history of Manchuria. This

country was the stronghold of the Turkish Tungus races who had their original home in North-Eastern China whence they migrated to Mongolia and Manchuria in the second millennium B.C., according to Shirokogoroff, the Russian anthropologist. One of their cousin branches founded the Wei dynasty of China, famous as patrons of Buddhist art. They were followed by the Khitan Tartars (10th century), the Kin Tartars (12th century), the Yuan or the Mongols (13th century) belonging to the Turko-Mongolian family which exerted profound influence on Asiatic history, culminating with the conquest of China by the Manchu Tartars (17th century) who were masters of China for over 300 years.

A few pre-historic sites, discovered so far, go to prove that this country may yield a rich harvest of antiquities. Pottery and clay images have been found in abundance. But few great architectural monuments have survived because the country was often ravaged by the rival tribes, the Tungus and the Mongols. The country was subjugated temporarily by the T'ang rulers, but it soon defied Chinese authority or held the country as a fief of the Chinese emperor. Unifying the 8 separate tribes, the Khitan or Liao dynasty (927-1104) opened its imperial career conquering not only the whole of Manchuria and North China but rivaling even the glory of the Sung emperors, they built five capitals during the 217 years of their existence. They were followed by the Kin or the " Golden Tartar " dynasty (1115-1234). They first entered into alliance with the Sungs, overthrew the Liao dynasty and extended their sway over the whole of North China till they were overthrown by the Mongols. In the Ming era (1368-1644), Middle and South Manchuria belonged to the Chinese empire, but it was again conquered by the Tartar-Manchus in 1644. Most of the temples of Manchuria testify to the great influence exerted on Manchuria by Tibetan Lamaism. The oldest and the most important city is Fengtien or modern Mukden. In its vicinity Dr. Andersson discovered valuable relics of pre-historic civilisation which we have described in our section on China. It was important as a political centre during the Yuan and Ming epochs, and in 1625 it came to be the capital of the Manchus who transferred their seat of Government to Peking in 1644. The walls round the city were built of large black bricks, hence the name 'brick-castle.' The length of the wall was about 3 miles pierced by two gates on each direction. Massive towers with coloured tiles mark the old palace of the Manchu emperors whose old historical treasures were deposited in the palace, occupied again after years by the new emperor of Manchukuo Pi-Yü who escaped from the Forbidden City of Peking—where he received us, when in 1924 we visited Peking with

Rabindranath Tagore. What the new regime will do for the art and archæology of Manchuria has yet to be seen.

The history and archæology of Korea and Manchuria are necessary adjuncts to Japanese art and culture, as we have often observed in connection with the evolution of China (*vide* Andreas Eckardt : *A History of Korean Art, 1929*). The ethnologists of Japan, for years, are tracing relations of the Japanese with the races of Manchuria. So Korea appears to be the centre of diffusion of the continental culture to Japan. Japanese scholars seemed to agree that the paintings in Horyu-ji (about 712 A.D.), the earliest Buddhist temple of Japan, were drawn by Korean painters who were strongly influenced by the Khotanese school of Indian painting. Japanese scholars discovered about 1905 a series of tomb-paintings in Korea which they are publishing through their brilliantly illustrated series *Chosen Koseki Zu-fu* which gives also excellent reproduction of the famous Korean reliefs from Sekkutsuan (750 A.D.). Those tomb-paintings were probably earlier than the works of the Chinese painters sent in 535 by the Liang rulers to the King of Korea. Buddhism entered Northern Korea from China in 372 A.D., but the paintings discovered at the tomb of the Four Gods at Baisanri, represent an indigenous tradition of Korean art which often remind us of the technique of primitive cave paintings. Non-Buddhistic cult figures of men and of richly dressed ladies have been found in several tombs of North Korea dating 400 to 500 A.D. In the great tomb at Kukenri (about 550 A.D.) we find the dragon motif on the east wall, the serpent and tortoise on the north wall and above them the figure of an *Apsaras* or Heavenly Nymph distinctly derived from Indian art which penetrated Korea in 535 A.D. with the Buddhist painters from Nanking. In 535 Korea, as it is reported, obtained from China a present of Commentaries on various Sūtras, particularly that of the great decease (*Mahāparinirvāna*), the Chinese *Shih-King* or the Book of Odes, besides doctors, painters and professors. Prof. Sirén observes in this connection : "Korean art shows on the whole in various periods a tendency towards exaggeration; it lacks the equipoise and stability of Chinese art and plays with the borrowed motifs in a lighter vein. Japanese sculpture seeks still more refinement of line; it is more lyrical and when at its best, it strikes a milder euphony than we find in the Northern Wei art."

Korean paintings along with Korean ceramics have begun to draw the scholarly attention of specialists. But as systematic surveys of the Korean arts and crafts are still not available, we shall proceed now to continue our narrative of Japanese art evolution from the historic epoch when Buddhism came to transform the entire fabric of Japanese life and culture.

Early Buddhist Art of Japan, 552-645

Buddhism was introduced to Japan in 552 through the happy mediation of Korean kings of Kudara, and after about 36 years of anti-Buddhist agitation, it came to be firmly established, thanks to the zeal and organisation of the first princely convert Shotoku Taishi (574-622), the second son of Emperor Yomei. He helped in the propagation of Buddhism by harmonising it with Shintoism. He also encouraged painting, sculpture and architecture, building some of the earliest Buddhist temples. The Empress Suiko was the pillar of strength to the cause of Buddhism and therefore the art of this period is very appropriately named after her. The most remarkable products of art were the bronze images and wood-carvings which are unique and which have received scholarly treatment at the hand of Prof. Langdon Warner in his *Japanese Sculpture of the Suiko Period* (1923), published by the Cleveland Museum of Art. Most of the bronze figures, cast in the *cire perdue* process, were gilded, gold being applied with mercury. The Buddhist wood sculptures were always decorated with colours or brightened with gold foil. Most of these statues remind us of the styles of the Wei dynasty of China. They are characterised by a rare spirit of sublimity and mysticism, and they are mostly found in the Horyu-ji temples near Nara. There was a phenomenal development of arts and crafts with the introduction of Buddhism, as we find from the temple objects and the famous gilt-bronze screens from Horyu-ji. This was possible because even before the reign of Empress Suiko, the Emperor Yuryaku invited artisans from Korea like potters, painters, brocade-weavers and saddlers. The sudden and somewhat revolutionary transition from the proto-historic to the historic art of Japan was marked by architecture, the most conservative of all arts. The most archaic style of Shinto architecture was based on the model of the primitive dwelling houses, as we find conserved still in the Taisha shrine of Izumo. The more advanced style is exemplified today by the famous Shinto shrine of Ise. But in the Suiko period, Japan welcomed the Chinese and the Korean styles of architecture marked by a rare dignity and delicacy of rhythm. There is always a *stūpa* in the square court-yard, and a *Kondo* or 'Golden Hall" behind which there stand a drum-tower and a bell-tower. The central group of buildings, facing South, is surrounded on the North, East and West by the *Vihāras* or the houses for the monks. The most valued possessions of each monastery are carefully preserved in the Shoso-in. The transition from the archaic Japanese architecture to a gorgeous temple like Horyu-ji is no less staggering than the

development of the Horyu-ji frescoes against the background of primitive painting of Japan and the rock frescoes in the archaic tombs described by Prof. K. Takahashi (*Kokka*, July, 1927). In 607 A.D. Prince Shotoku sent an embassay to the Chinese court, and the same year he founded the noble Horyu-ji, the most ancient and venerated temple-group of Japan. Thus the Prince inaugurated a veritable era of cultural revolution with which Japan suddenly emerged from her primitive isolation and began to play a leading role in the history of the Orient.

Nara Period—646-793 A.D.

While Hiuen Ts'ang was preparing to return to China with his invaluable collections of Indian sacred texts and art treasures which would go to produce a veritable revolution in the cultural life of China, Japan during the second half of the seventh century also underwent a similar transformation. For T'ang art and culture saturated the Japanese national life, and Buddhism succeeded in effecting a most thorough and peaceful conquest of the country. In imitation of the T'ang Emperors, the entire court life and provincial administration were reorganised by the Great Reform of 645. The old Japanese patriarchal clans were replaced by a centralised state, and the scattered cities of Yamato culure had to yield finally to the capital of Nara where the Emperor with his court took up residence in 710 A.D.

Shintoist opposition to the continental religion of Buddhism was tactfully overcome by the famous Korean monk Gyogi who settled in Japan during the reign of Emperor Shomu (724-48) and promulgated the doctrine of Ryobu-Shinto, according to which the national gods of Japan were recognised and honoured as manifestations of the Buddha. The renowned Chinese scholar-monk Kanshin also visited Japan in 754, and the colossal statue of the Buddha, the *Daibutsu*, over 50 ft. high, was consecrated (746) in the Todaiji temple at Nara. The Buddhist culture which now penetrated Japan was necessarily not purely Indian but of a cosmopolitan character : as M. Grousset has appropriately observed : " Buddhism brought with it into the archipelago not only Indian philosophy but also Chinese architecture, Indo-Greek, Indo-Gupta, Wei and T'ang sculpture, and all the pictorical traditions of Indian, Iranian and T'ang paintings now familiar to us from the discoveries in Central Asia and Korea; the paintings of Horyu-ji are derived from Ajanta through the frescoes of Khotan, Kucha and Tun-Huang and of the Korean tomb of Sammyori." Prof. Serge Eliseev, an authority on Japanese art, traces the direct influence of the Chinese Wei architecture on the early temples of Japan like Shitenniji (587) and Horyu-ji (593-607

A.D.). The exquisite Buddhist Trinity in bronze, now in the golden hall of Horyu-ji, was most probably the work of Korean artists who are reported to be the authors of the Horyu-ji frescoes as well. These priceless treasures of art have been reproduced at an enormous expense in the Japanese publication *Horyuji Okagami.* The Japanese sculpture of this period often reminds us of the earliest and the best reliefs at Lung-Men. But while the Chinese sculptures are interesting from iconographic point of view, the Japanese images excel in their supreme aesthetic appeal. The incomparable lines and flourishes of the Ajanta school are clearly traceable in the works of the Horyu-ji, and though there is a tendency, of late, to minimise the Indian influence, it has been ably and conclusively vindicated by the French specialist René Grousset, who writes : " Towards the sixth and seventh centuries the living aesthetic ideal of Gupta India replaced the outworn Hellenistic models in Central Asia. It was this fresh influx of vigour, flowing northwards from the Ganges Valley, that gave rise to the Sui renaissance in China, from which were derived in turn the great Japanese schools of Nara." But what Japan borrowed she not only transformed but carried to the highest pitch of perception by virtue of her rare individuality in aesthetic realisation for which Grousset has called the Japanese ' the Greeks of the Orient ' who created, as it were, a new Hellas on this island of the Far East.

The Japanese artists began to show a rare sense of realism and individual portraiture in and through the figures of the disciples of the Buddha and the various historical monks who contributed to the glory of Buddhism. Along with this tradition of religious art, there were the influences of secular schools, as we find from the wonderful painting of the Goddess of Beauty Kichijoten (or Srī-dēvī) of the Yakushiji monastery, but now preserved in the Imperial Household Museum at Nara. The " sublime carnality of Krishnaism " is manifest, as pointed out by Grousset, in the princely figures of many Bodhisattvas, just as we find in India. On the contrary, super-human traits of Mahāyāna iconography also came to be represented in figures like that of the eleven-headed Kwannon, standing against the simple humanity and inimitable grace of Gakkwo Bonten (750), the Japanese Brahmā made of clay and lacquer by the Nara school.

The same refinement of aesthetic instinct is manifest no less in the applied and decorative arts, some rare examples of which are luckily preserved in the Shoso-in, the wooden treasure-house built in the reign of Emperor Shomu (724-748) who was a great patron of artists and artisans. Beautiful designs are found on musical instruments like the *biwa* or lute made of sandal wood inlaid with flowers and birds in mother-of-pearl. Entire scenes

are sometimes represented on a seven-stringed harp with its surface and backside all lacquered black and inlaid with gold and silver plates cut into figures of exquisite workmanship. Such inlaid designs are also found in the bronze mirrors and other metal wares in the priceless collection of the Shoso-in. The object which surprises us most is the gilt bronze jug with the figure of a winged horse which is typically Persian in design. Persian patterns are also seen on a tapestry with hunting scenes in which four lion-hunting knights are riding winged horses. The collection of textile fabrics in the Shoso-in and in the Tokyo Imperial Household Museum prove conclusively that, thanks to continental Buddhism, Japan was not only not isolated but she actively participated in the development of Oriental silk industry and other textiles which were so famous that it was imported into Europe in the sixth century by Emperor Justinian. Already in the 5th century Emperor Yuryaku (457-479) encouraged sericulture, and on the Japanese textiles we find the same designs discovered also on those from Persia and Antinoë in Northern Egypt. Sassanian influence appeared to have spread over the vast area extending from Persia to the Roman Empire on the one hand and the Japanese Empire on the other. The barrier between the East and the West would disappear if we could only study the history of arts and crafts from the point of view of such large historical relationships.

From the numerous manuscripts beautifully copied, now preserved in the Shoso-in treasury, we come to know that Japanese literature also felt the creative urge of that great age. The oldest anthology of Japanese poems, the *Manyoshu* or " Ten thousand Pages " was compiled about 750 (translated by J. L. Pierson, Leiden, 1929). It contains the immortal pieces of early Japanese poets like Hitomaro, Akahito and Prince Aki, who excel even their poetic contemporaries of the T'ang period. Indian music, " the Lumbini orchestra " and dramatic themes also came to enrich the soul of the Japanese people, who, while they considered China as the " centre of civilisation " now looked upon India as the " heavenly kingdom (*Ten-jiku*)."

Kyoto and the Art of the Heian Period

In 794, Emperor Kammu removed the capital from Nara to Kyoto which remained the imperial capital up to 1868. But the period of its best artistic activity was from 794-889. The priests of Nara were as usual demoralised by power and courtly glamour. So the Emperor backed the reform movement initiated by Dengyo Daishi (767-822) who visited China and introduced therefrom a sort of an *Adwaita* doctrine of the Tendai sect

which believes that all human beings are destined like Buddha to reach the Perfect Illumination. In 804, Dengyo's pupil Kobo Daishi (744-835) also visited China and introduced the mystical doctrine of the Shingon sect which came to believe that the Buddha's " Body, Word and Action make up the life of the Universe, both as a whole and in everyone of its parts."

Thus, as Prof. Anesaki has demonstrated in his *Buddhist Art in its Relation to Buddhist Ideals*, the whole Universe came to be considered as one vast symbol of the Divine or the Absolute, echoing thereby the Upanishadic Vedanta of India and its Chinese counterpart, namely, Taoism. In 816, Kobo Daishi founded the grand spiritual colony on the Koyasan mountain. He himself was an artist, for several works of painting and sculpture are attributed to him. I found in 1937 that a special museum had been founded there, and the Kokka Publishing Company issued a volume entitled *The Art Treasures of the Koyasan Temple*. Here we notice in Japan of this period as in the history of Tibetan Buddhism an invasion of the tendencies and principles of medieval Hindu art exemplified by the Ellora and Elephanta Schools (757-900 A.D.) and of the Pāla School (750-1060 A.D.). The multiplicity of arms and heads and such other features of Tantric Buddhist art of India suddenly came to disturb the pure anthropomorphism and moderation of the Japanese. Japan, however, conserved better than Buddhist China the sense of proportion and moderation. But Japan definitely ceased henceforth to be the simple " Child of the Sun." She began to grapple with the problems of metaphysics. The Japanese Red Fudo of Koyasan is a spiritual descendant of the Cosmic Indian Divinity Siva, and Saivism came to be fused with Buddhism in the Shingon sect of Japan. This has happened in earlier epochs, as we have noticed in the art and iconography of Khotan, in the Wei sculpture of China, as well as in the paintings of Tun-Huang. These elements in the Heian art, somewhat foreign to Japanese genius, have been analysed by Prof. Eliseev. In this epoch also the influence of Sassanian Persia came *via* Khotan and Kucha to Japan, as we notice in the figure of war-like divinities like Bishamon or Vaisravana whose historical origin has been traced by Y. Matsumoto (*Kokka*, February, 1930). The celebrated literary anthology of the Heian epoch (794-1192) is the *Kokinshu* or ' poems, ancient and modern,' collected between 905-922. Though the literature of this period mainly depicts the court and domestic life, we find therein a happy fusion of the feeling for nature with the deep moral sensibility of Buddhism. The innate classical spirit and restraint of the Japanese took shape in a series of novels : the *Ise Monogatari* (about 900 A.D.) and the *Genji Monogatari* (about 1000 A.D.) composed by Lady

Murasaki. Another poetess of the Court, Sei Shonagon, composed the *Makura-no-soshi* or Pillow ' Sketches ' where we find an exquisite blending of humour and refinement. The court atmosphere was surcharged with " love-poems, Buddhist piety, and caprices of fashion." But this polite society soon came to be disturbed by the bellicose spirit of the Fujiwara clan symbolised as it were, by the terrific incarnations of the Fudo (or Acala) with an awful straight sword on one hand and a *pāsa* or rope-noose on the other. These like most of the Japanese sculptures are either in wood or in bronze. But an exception for the first time is found in the rock-cut stone images recently discovered. China, as we know, borrowed long ago from India the style of carving rock-cut shrines, which, however, could not be naturalised in Japan, for suitable rocks were not available. But the T'ang dynasty introduced the style of carving Buddhist images on the open cliffs, and it was introduced into Japan in the Heian period. Such images are numerous in the province of Mungo in the island of Kyushu, which was always the first to receive continental influences. The colossal Buddha figure from Fukade is marked by a rare grace and serenity. The veteran Japanese archæologist the late President K. Hamada studied these rare sculptures in detail in a special monograph published by Kyoto Imperial University, 1925 (" The Rock-cut Buddhist Images in the province of Bungo."). Prof. T. Ogawa has also discussed these sculptures coming from 9th-10th century A.D. (*Kokka*, Nos. 292-93). The Japanese scholars demonstrate that the Bungo images with their free naturalistic treatment in drapery and physiognomy were offsprings of the T'ang art. The Bungo images come definitely after the style of the Six Dynasties of China reflected on the images of the Suiko period with almond-shaped eyes, rigid drapery and archaic smile. The influence of the Indian caves was obvious on the grottos of the Six Dynasties. But in the T'ang epoch there was a new kind of rock-cut temple of the Lung-Men type, open in front, with the images sheltered by wooden structures. This is exactly what we find in the Bungo province of Kyushu, where suitable rocks were available. Rock-cut images were temporarily in fashion, but disappeared after the Kamakura period. The influence of T'ang art is also visible in the temples and palaces of Kyoto, and the esoteric Buddhism of the Tendai and Shingon sects added new elements in the Buddhistic and Shinto architecture. The soaring five-storied *stūpa* of the Muro-oji temple signified to the Japanese devotees all the Laws of the Universe. Industrial arts as well as painting flourished under great artists like Kukai, Saicho, Kawanari, Kanoaka and others who painted religious as well as secular subjects.

III

The Fujiwara Period (894-1185)

ACCORDING to Japanese authorities like Prof. Seiichi Taki (*Year-Book of Japanese Art*, 1929-30), the period is divided into two distinct epochs : 889-1069, and 1069-1192, marked by two distinct styles. The Sino-Indian cultural fabric built up in course of the Nara and Kyoto periods was at first rudely disturbed by the brutality and violence of the feudal lords who represented a characteristic aspect of Japanese history redeemed occasionally by noble episodes of heroism and chivalry prevailing with the Samurai and their code of honour, the *Bushido*, which was almost raised to the status of religion. Special heraldic designs, based on floral or geometrical motives, came to characterise henceforth the influential clans or families like the Fujiwara, the Taira, the Minamoto, the Hojo, the Ashikaga and the Tokugawa, who continued the feudal tradition down to the middle of the 19th century. Sometimes the feuds between the rival clans assumed colossal proportions, as in the case of conflicts between the Minamoto and the Taira families which resulted in the defeat of the Southern clans of Kyoto and Kyushu and the ascendency for seven centuries of the warriors of the Northern province of Kanto (near Tokyo).

During this period of feudal violence, Japan developed the wonderful cult of Amida, or Amitābha, who as Bodhi-sattva extended his spiritual sway over India, Iran and Central Asia during the Scythian period. A Parthian Prince Ngan Shih-Kao preached for the first time in China, between 148-170 A.D., the creed of Sukhāvatī or the Blessed Land, in Japanese Jodo. The abstract philosophy of the Nirvāna was thus replaced by the metaphysical monism or in fact the theism of the Amida who loves all living beings as parts of his own nature and under whose eyes the suffering souls of this world would be reborn in the blissful paradise represented by the mystic lotus of the Japanese painting of this epoch. The greatest champion of this Bhakti cult of Japan was Honen (1133-1212), whose life has been ably discussed by R. Ishizuka (Kyoto, 1925). Honen founded the Jodo sect in 1174 and, like the medieval Indian mystics, brought consolation and the hope of salvation not only to the aristocrats and heroes but to the humble men and women, not excluding even thieves and prostitutes. His success was phenomenal, and that is why he was banished at the age of 74 (1207) by his rivals of the aristocratic church which under the deadweight of dogmas

missed the gem of Ahimsā or Non-violence and Charity which was the very soul of Buddhism. The exclusive religion of the esoteric sects like the Tendai was replaced by the democratic Amida cult of Salvation by Faith. The artists of this epoch, sculptors as well as painters, were characterised by a rare simplicity and softness, which occasionally degenerated into effeminacy. Many of the Bodhi-sattvas came to be represented with an almost feminine elegance which often lacked the vigour of expression of the earlier art. The Moon-Goddess, and Kichijoten or Srī, together with Kshitigarbha in Japanese Jizō came to be represented in many temples of this epoch. Now and then a monk painter like Toba Soja (1053-.1114) showed a rare spirit of realistic humour and caricature in his subtle studies of rabbits and frogs, and of men and monkeys. The great popularity of painting in this epoch was mainly due to the tremendous influence of priest-painters like Eshin Sozu, some of whose paintings are preserved in the Nara Imperial Household Museum and also in the Reiho-Kwan Museum on the Koyasan mountain where we find the gorgeous picture of Amitābha and 25 Bodhi-sattvas arranged in a heavenly orchestra. One of the glories of the Fujiwara period is the "Resurrection of Sākya-muni" from a gold coffin owned by the Chohoji monastery, now exhibited in the Kyoto Museum of Art, which also exhibits splendid illuminated manuscripts of the Buddhist scriptures in Chinese. Secular stories like those written by Lady Murasaki also came to be illustrated in picture scrolls depicting the life of the nobility of the Fujiwara epoch, which, towards its close under the patronage of the Art Department of the Imperial Court, developed important schools like Takuma, Kasuga and Tosha. Traditions and samples of the great Sung paintings of China also now entered Japan, to develop new indigenous schools and tendencies. The sculpture lagged behind the painting of this epoch, possibly owing to the urge for mass production by professional sculptors who lacked the inspiration of the priestly carvers of the divine figures. Gold and various rich colours were used profusely in painting as well as sculpture. In the applied arts the Japanese artists showed remarkable originality and perfection, assimilating the borrowed Chinese ideas and developing purely indigenous designs in metal, lacquer, inlay work and architectural decoration. The native genius asserted also in architecture through monasteries like Hojoji, the five-storied *stūpa* of the Daigoji and the three-storied *stūpa* of the Joruriji near Kyoto.

Dawn of Realism in the Kamakura Period (1186-1333)

Through the animal studies, caricatures and the illustration of the novels of the Fujiwara period, we felt that the Japanese genius was trying

to escape from the obsession of religion and pietism. The art which developed at the new capital Kamakura was characterised by a martial spirit and a national consciousness. The intercourse with the Sung dynasty of China and the importation of Sung paintings necessarily helped new developments of Japanese art which came to be surcharged with the spirit of Zen Buddhism introduced now, transforming the martial spirit of the race. The old Buddhism was transformed by national reformers like Honen (1133-1212), Shinran (1170-1263) and Nichiren (1222-1282). The strong personality of these reformers naturally helped the growth of individualism in art and culture. The *emakimono* or picture scrolls displayed the pure Japanese spirit in rendering vividly historical, legendary and religious subjects. Some of the most valuable specimens, copies and prototypes of the Sung and Yuan paintings, came to be collected and studied, leading to a veritable revival of the Chinese style in Japan. The figures of the Juni-Ten or Twelve Devas preserved in the To-ji temple of Kyoto, represent the best tradition. In the Sung style also came to be painted the portraits of the makers of Japanese history like Prince Shotoku and Yoritomo. A picture scroll of the Mongol invasion is in the Imperial Household Collection, which preserves a few brilliant animal caricatures on paper in black and white.

Yoritomo, the first *Shogun* of Kamakura, began the reconstruction of the great monasteries of Nara. This gave a new impetus as much to Japanese architecture as to sculpture. The old conventional repose of the Fujiwara sculptures was transformed by the dynamical spirit of this martial age, and great sculptors like Kokei and his son Unkei worked at the Nara temples emphasising the accurate depiction of the plastic poses and the movements which remind us of the vigorous brush strokes of the contemporary painters. While rstoring the monasteries of Nara, these sculptors caught the infection of the master sculptors of the Tempyo period. The son of Unkei was also a great sculptor, named Jokei, and their rival was Kwaikei who reinterpreted the old forms through his serene Buddhas and Bodhi-sattvas. Most of the sculptures were in wood, the exception being the colossal bronze statue of Amida and Kamakura. Powerful portrait statues of extraordinary vitality and realism have come from the Kamakura artists, a few of whom had the boldness and originality of producing nude figures of the Buddhist and Shinto deities, including the unique figure of the Goddess of Music Benzaiten (Sarasvatī). In the department of the minor arts a great impetus was given to metal work through sword-making and the manufacture of arms and armour. Pottery, mostly imported from China from he T'ang to the Sung period, was first made a national industry of Japan by Tashiro who

studied the ceramic industry in China for five years and constructed a kiln in the village of Seto near Nagoya. Hence porcelain in Japan came to have the general name of *Setomono.*

In the department of architecture we find three different styles at the beginning of the Kamakura period : (1) The native style or Wa-yo, (2) the Hindu style called Tenjiku-yo which was reintroduced from China in order to restore the Nara temples, and (3) the Chinese style called Kara-yo which came in the Sung epoch to Japan with Zen Buddhism and remained to exert a profound influence on the Kamakura and the succeeding styles of architecture. Thus the renewed intercourse between China and Japan in the 13th century gave rise to different styles which tended to be a hybrid about the middle of the 14th century. The plan of the Zen temples was elaborate and complicated, but few of them have remained in their original form. The most famous examples of the Hindu style of architecture are to be seen in the Jodoji monastery in the province of Harima and the great southgate (Nandai-mon) of the Daibutan at Nara.

The Kamakura period (*Cf.* K. Hamada—*Japanese Art of the Kamakura Period,* Kokka, April and June, 1910) was characterised both in politics and art by two different traditions, that of the civil regime of the Imperial Court at Kyoto and that of the camp government at Kamakura at the mouth of the gulf of Tokyo, where Yoritomo established his capital as the *Shogun* or the supreme military chief recognised by the Emperor in 1192. The rival cultural currents would be harmonised in the Ashikaga epoch. The power soon went to the Hōjō family whose representative Tokimune (1256-1284) gloriously defended Japan from the invasion of the Mongols under Kublai Khan. When the Hōjō house decayed threatening Japan with anarchy, the Emperor Daigo after centuries assumed full sovereignty in 1319. But his noble work was soon frustrated by the Ashikaga Shoguns who murdered the Crown Prince and started the Muromachi period (1334-1573) famous for its idealistic art under Zen inspiration. The conquerors of the Mongols as well as the military aristocracy of the 13th and 14th centuries drew their strength and rare courage from the transcendental calm of the Zen-shu, a rare combination of Indian Buddhism and Chinese Taoism.

Art during the Ashikaga or Muromachi Period (1334-1573)

The temporary ascendency of the royal family of Japan came to a sad end when Masashige, the Bayard of the Imperial cause, was killed in 1336, and the Ashikaga Takanji triumphantly entered Kyoto, building their residence of Muromachi which gave its name to the literary period from

1592 to 1603. Ashikaga Yoshimitsu (1368-1408) as well as Yoshimasa (1449-90), who built the silver pavilion, the *Ginkakuji* east of Kyoto, were great patrons of art and literature. But soon the Daimyos or the feudal barons got the upper hand and frequently plunged the country into civil wars. Thus 16th century Japan resembled the 15th century Italy with political confusions marching hand in hand with artistic renaissance. The boisterous spirit of the age forced the adventurous clans to embark upon repeated expeditions to the coasts of Central and Southern China as well as to Formosa, Hainan and the Philippines. In the 16th century, the Japanese mariners specially from Kyushu often crossed the path of the Spanish, the Portuguese and the Dutch adventurers and traders. Francis Xavier, the Roman Catholic preacher, landed in Japan (August, 1549), remaining there till November 1551, and the Jesuit mission brought Japan in contact with Western life and art. But before Japan would be called to tackle with the occidental problems in the 19th century, she could make a substantial contribution to Asiatic art through her portraitists and landscape painters (of the 15th and 16th centuries) who, in spite of their being deeply influenced by the Chinese art of the Sung and Yuan periods, nevertheless asserted their national individuality. The master painter of this period was Sesshu (1420-1506) who visited China (1463-1469) and was received at the court of the Ming Emperors. With rare originality he rose above the vagueness of the Sung metaphysical school, and introduced a rugged romanticism, liberating thereby the personality of the Japanese artists hitherto dominated by the collective religious traditions of the Sino-Indian art. His splendid portrait of Bodhi-Dharma as well as his profound nature studies marked Sesshu as one of the greatest painters of all ages. Another great painter is Soami (1450-1530), who was a master of tender delineation of nature without any metaphysical suggestion. A third great painter was Sesson, who continued to work till 1572 and linked up the earlier schools of Japanese art with the famous Kano school which came to fill the history of Japanese art from the middle of the 15th to the middle of the 19th century. Its founder was Kano Masanobu (1453-1490), whose tradition was continued by his son Motonobu (1476-1559). The Kano school generally represented the Sino-Japanese academic style, lacking the divine urge of creative artists, yet it was infinitely superior to the Ming painters. That is how the Kano school dominated Japanese art for over 300 years by their absolute mastery of technique and their keen sense of the " earth earthy." They were not mere grammarians like the Ming painters, they were great stylists as well. Art not only came to be professional but almost hereditary by way of father to

son or master to pupil, as we find also in the famous Tōsa school led by Mitsunobu (1434-1525) and Mitsumoto (1530-1559) with extraordinary finish in their drawings and their delicate feeling for colour. According to Prof. Eliseev, their works mark the epoch of the general secularization of art and assertion of national individuality.

The return from Kamakura to Kyoto naturally developed the Kyoto school of art, and that is why we find some of their finest specimens in the Kyoto Museum, although many of them have come to be acquired by the Tokyo Imperial Museum. This was an age of progressive Japanisation, and the Buddhist cults and temples as things foreign in origin were somewhat neglected. Confucianism and Taoism slowly penetrated and were assimilated by the Japanese genius. Towards the beginning of the 15th century we find a few important architectural constructions such as the five-storied *stūpa* and the golden hall of the Kofukuji monastery at Nara. In secular architectures we find the influence of Zen Buddhism, as well as in the Tea Cult, both closely associated with the development of the art of gardening. Kakuzo Okakura has shown in his famous *Book of Tea* how the Tea Ceremony came to influence profoundly the social and artistic life of Japan. Yoshimasa (1449-1490) was an enthusiastic collector of art objects from China, and a catalogue was compiled by his attendant connoisseur Noami. There we find a commentary on tea bowls and on other items of the Tea Ceremony, together with instructions as to how to judge pictures and the genuineness of art objects. This catalogue came to have almost a scriptural authority amongst Tea Masters and Art Critics. Yoshimasa neglected politics as he was passionately devoted to literature and art. He surrounded himself with learned Buddhist priests, poets and actors, who collaborated in the development of that great art of Japan manifested in the *Nō* dramas largely based on Buddhist subjects, and stimulated the progress of portrait sculpture through the infinite variety and subtlety of Nō masks.

Momoyama Period (1574-1614)

The Ashikaga family was superseded by an astute politician Nobunaga (1534-82) who strengthened his position by forming the best feudal army of the day, winning over to his side an aristocrat like Tokugawa Ieyasu and a peasant military genius, who after Nobunaga came to be the Japanese Napoleon, Hideyoshi. The Buddhist orders like the Honganji group of Osaka, who formed a state within a state, were ruthlessly suppressed, and temples and monasteries which were citadels were destroyed. The first dictator Nobunaga was assassinated in 1582, and his general Hide-

yoshi (1583-1598) stepped into the breach. He was the first to set the example of political unification of the country by suppressing all sectional and separatist tendencies of the feudal clans, specially of the island of Kyushu. For the first time in Japanese history a plebian came to be the protector of the realm, transcending caste prejudices. Under him Japan ceased to be an isolated country and definitely desired an Asiatic empire. Hence his expeditions to China and Korea. In 1590 the Korean king ordered the destruction of Fusan, the Japanese trading colony. Thus under the flag of Hideyoshi the warriors of the different feudal clans for the first time stood united. The Ming dynasty was decaying, but its forces joined the Korean and continued defensive wars. Korea, if not the whole of China, would have been conquered by the Japanese but for the sudden death of Hideyoshi in 1598. His ideas, however, was carried on by the third dictator Ieyasu who triumphed over all contending factions in a big battle of October, 1600.

The two great national schools of painting were the *Tosas* who faithfully depicted the epic tradition of Japan, and the *Kanos* who left admirable animal studies and mural decorations as in the famous Momoyama palace of Hideyoshi and also in the Nishi Honganji temple at Kyoto. The Kano artists through their preference for decorative art were the real precursors of the *Ukiyo-e* school of popular art. The grand Sung tradition of drawing monochrome pieces in wash with Chinese ink was gone, being now replaced by gaudy colours and gold backgrounds characterising the Ming art with its "sensuous diletantism." Gorgeous lacquer works came to be as much valued as painting, and the arch spirit of this age was Koetsu (1557-1637) who worked side by side with Sotatsu (1576-1643), and whose style of decorative painting of rich colour was developed further by Kōrin. Koetsu was called the Leonardo da Vinci of Japan by Yone Noguchi. He was a born decorator of the grand style in every medium. His portraits and lacquer works are the treasures of the Odin and the Vever collection of Paris, and his magnificent screens are cherished by the Boston Museum and the Freer Gallery of Washington. The three great military heroes, Hideyoshi above all, wanted to display their greatness through architectural decorations, as we find in the paintings of Eitoku (1543-1590) on the golden walls of the Osaka Castles. This master of the Kano school trained another great artist Sanraku (1559-1635) who excelled in painting sliding screens and gorgeous murals. He was also great in painting flowers and birds. His fellow-student under Eitoku was Ousho (1533-1615). He was equally famous in animal and human figures. One of his famous screens, now in the Kyoto

Museum, represent the Three Tasters of Vinegar, symbolishing the fact that the ultimate source of Taoism, Confucianism and Buddhism is the same though their attitudes to life and their preachings were different. Buddhism was definitely declining at that time, and it was specially noticeable in sculpture. The only noteworthy Buddhist architecture of the period was the Golden Hall of the To-ji monastery of Kyoto. It was an age of grand castles and sumptuous dwelling houses. A new style was introduced in Shinto architecture with interior decorations in Buddhist style. The whole of this gorgeous art stands in striking contrast against the archaic simplicity in the architecture and decorations of the houses for Tea Ceremony, called *Sukiya.* Here we find a veritable poetry of rusticity as we notice in that wonderful Raku-yaki tea bowl made by Chojiro, the master of ceramic art employed by Hideyoshi. Many Korean potters were brought to Japan during the expeditions of Hideyoshi, and they helped in the remarkable development of the porcelain industry in Japan. The weak son of Hideyoshi was overthrown by Ieyasu who in 1603 made Yedo (later known as Tokyo) his headquarters, and Yedo came to be the most important centre of the political, social and artistic life of the nation from 1615 when the Ieyasu formally established the Tokugawa Shogunate, which continued down to 1867.

YEDO PERIOD (1615-1866)

The age of the Tokugawas was an age of discipline and regulations. The troublesome and adventurous Daimyos whom Hideyoshi wanted to utilize for his grand project of Asiatic empire were obliged to spend most of their time near about the Tokyo court of the Shogun. Their spirit was completely ruined amid the luxuries and festivities of Yedo. The Tokugawas closed their country to all foreigners, whether missionaries, merchants or mariners, while the previous generation of Japanese sailors and merchants frequently visited China, Korea, Formosa, the Philippines, Indo-China and even India. In this age of narrowness and isolation, Japanese art was largely characterised by " feats of virtuosity," as we find in the works of Sansetsu (1589-1651) and of Naonobu (1607-1650), and Tannyu (1602-74), the elder brother of Naonobu.

Between 1688-1703, known as the Genroku Period, there appeared an all-round genius combining the Kano and the Tosa traditions, showing the bold designs of the former and the decorative effects of the latter. Such was Ogata Kōrin (1653-1716), a master in painting as well as in lacquer work to whom Yone Noguchi dedicated a special study (1922). He was the

most famous painter of the Genroku era (1688-1703). A great landscape and animal painter was Okyo (1733-95) who was followed by other noble landscape painters like Buncho and Buson who continued to work almost up to the beginning of the Mei-ji revolution.

But the general public was apparently fed up with the academic subjects and plunged into the study and appreciation of plebian life, developing thereby the popular school of the Ukiyo-e. This school was influenced by the Ming and Ch'ing paintings pre-occupied with the portraits of young girls or courtesans. Everyday life came to be expressed through painting, but mostly through popular prints, now the glory of Japanese wood-engraving. At first the prints were in black and white, but about 1742 the Japanese discovered the process of printing from several blocks charged with different colours. A master of such colour printing was Masanobu who died about 1761. But probably the greatest master of colour prints was Harunobu (1730-1770), a great interpreter of the womanhood of Japan. In the works of Kiyonaga (1742-1815), Japanese colour print reached its highest level, according to M. Grousset who quotes approvingly the opinion of Fenollosa : "The lines are more harmonious than Botticelli, more suave and flowing than Greek painting, and suggesting even Greek sculpture." Another artist, Sharaku, devoted himself to the psychological study of the famous actors of his day (1789-1800). A great painter of the *Geishas* and courtesans was Utamaro (1754-1806), to whom also Noguchi has devoted a special volume (1925). Though depicting the underworld, no vulgarity could be traced in the works of Utamaro who was a master colourist.

The head of the realistic school was Hokusai (1760-1849) who staggers us by his variety and productiveness. He was the first to introduce realistic landscapes and animated crowds. His most remarkable work was "the Thirty-six Views of Fuji." Another great artist was Hiroshige (1797-1858) who was a veritable poet of nature and who transformed everything by the magic touch of his brush. He surveys everything, the earth and the sea in a bird's eye-view suggesting the flights of the soul through space and immensity. Jiro Harada of the Imperial Household Museum has written an authoritative volume on Hiroshige, and recently in commemoration of the 2,600th anniversary of the foundation of the Japanese State, Yone Noguchi has brought out a sumptuous study of Hiroshige with a number of fine plates. Thus down to the middle of the 19th century Japan could produce great artists, thanks partially to the aristocratic isolation imposed by the Tokugawas, while India, China and Persia, as lamented by Grousset, suffered terribly from internal declay of art instincts and the external imposition of

Western commercialism. Japan escaped denationalisation and thus pointed to the path of regeneration for the other nations of Asia.

Modern Japanese Arts

In the Yedo period, the ceramic art of Japan made remarkable progress, and famous kilns produced wonderful specimens from Kyoto, Hizen, Satsuma and Kaga. One of the leading ceramist was Ninsei (1596-1660), who rose above the Chinese or Korean styles and vindicated the claims of the Japanese genius. The art of gold lacquer reached the zenith of perfection in this period, and the famous Koetsu was a veritable genius in this branch of art and his style was developed in Kyoto by Kōrin. Kyoto was also the most important centre of high-grade weaving. The Chinese trading ships followed by the Portuguese, the Spanish and the Dutch vessels introduced some of the best samples of textile industry to Japan. The industry was further developed with the enormous popularity of the Nō drama. The gorgeous costumes of the actors were mostly fabricated in Kyoto and Yedo.

In architecture we find little originality. A few Buddhist temples deserve mention : The Hall of Buddha (1583) and the Hall of Preaching (1656) in the Myoshin-ji monastery of Kyoto, and the Daibutsu Hall (1708) of the Todai-ji monastery of Nara. In the Mampuku-ji monastery near Kyoto we notice the pure Chinese style, which entered Japan with the Obaku branch of the Zen sect of Buddhism.

In 1867 the last Shogun of the Tokugawa retired, making room for the great emperor Mutsu-hito Mei-ji who removed his capital from Kyoto to Yedo (changed into Tokyo). This was an age of aggressive Western influence which will be checked by Lafcadio Hearn, Okakura, Fenollosa and others. From 1887 there was a healthy reaction against the blind imitation of the West. This movement was led by Ernest Fenollosa, a graduate of the Harvard University, who came in 1878 as a professor of philosophy at the Tokyo Imperial University. He secured the co-operation of the great Japanese art critic Okakura Kakuzo who later on went to the Boston Museum of Fine Arts. Okakura also spent some times in India co-operating intimately with the Tagores who are pioneers of the revival of Indian art. In 1888, the Japanese government established an art school at Uyeno Park, Tokyo, and two of its professors Kano Hogai (1828-1888) and Hasimoto Gaho (1835-1908) were greatly influenced by Okakura and Fenollosa. The picture of the all-merciful mother (Hibo Kwannon) is the most famous work of the idealistic type drawn by Hogai. He died in 1888 before the

opening of the art school, but his style was followed and developed by Gaho, among whose masterpieces we notice the " Autumn Landscape " now in the Tokyo Imperial Household Museum. Some of the pupils of Gaho are great masters of contemporary Japan who resigned with Mr. Okakura from the Government school and organised a new art academy, the Nihon Bijutsu-in at Yanaka, Tokyo. To mention only a few of this famous group of painters we refer to Hishida Shunso, Kawai Gyokudo, Arai Kampo, and, above all, two veritable masters Shimomura Kanzan and Yokoyama Taikan, who started the new movement with the motto—" life true to self." Many of these painters serve in the Art Exhibition Committee for Japanese Painting which grew out of the exhibition of Japanese and Western paintings organised in 1907 by the Department of Education. From 1919, the annual Government Exhibition is being held under the auspices of the Imperial Fine Arts Academy. After a temporary domination of the West there was a distinct revival of nationalism with an attempt to harmonise the old and the new, best illustrated by Taikan with his eclectic researches into Oriental as well as Occidental schools of art. Taikan worked for sometimes in the studio of Abanindranath Tagore in Calcutta.

The Imperial Fine Arts Academy has for its object the promotion of national arts. It holds the annual exhibition in autumn dividing it into four sections : Japanese Painting, Western Painting, Sculpture and Applied Arts. At the end the Committee issues certificate of special merit and confers the academic prize. The National School of Painting now presided over by Taikan also holds exhibitions. The Western styles of painting of the modern and ultra-modern types find a ready response amongst a large number of Japanese artists, who hold exhibitions in spring and autumn. A few leading artists of this school are Ishii Hakutei, and Arishima Ikuma, besides others. But there is no permanent museum as yet for the contemporary artists of Japan, who show their works often in small galleries in Tokyo and Kyoto, Nagoya and Osaka.

IV

The National Art Treasures and Museums of Japan

WITHIN 15 years from the accession of the great emperor Meiji, the Imperial Household Museum was opened (1882) in the Ueno Park, Tokyo. Before describing this magnificent museum in detail, I should give the general outline of the policy of the Government with regard to the preservation of national treasures and monuments. During my visit to Japan with Dr. Rabindranath Tagore in 1924 I had the rare good fortune of being shown round some of the unique art collections, thanks to the kindness and courtesy of great artists like Shimomura and Taikan who personally took Nandalal Bose and myself through many public as well as private collections. Eminent scholars like Prof. Anesaki and Dr. Takakusu also introduced us to the academic groups, while the brother of the late Kakuzo Okakura and the poet Yone Noguchi were of very great assistance. So during my last visits to the Japanese collections on my way to and from Honolulu and also while attending the World Conference of Education in Tokyo (1937), I was thankful for the spontaneous help offered by eminent archæologists and art critics like President K. Hamada and Prof. Umehara of the Kyoto Imperial University, and Dr. Jiro Harada of the Imperial Household Museum, Tokyo. I am specially grateful to the Kokusai Bunka Shinkokai for supplying me generously with their publications and photographic documents, and I remember in this connection the help rendered by Count Kabayama, Count Kuroda, Baron Ino Dan, Mr. Aoki and others. I was fortunate also to travel to South America, to attend the International P. E. N. Congress at Buenos Aires in 1936, in the enlightened company of Shimazaki Toson (the Tagore of Japan) and the celebrated artist Ikuma Arishama, from whom I got invaluable hints with regard to the recent trends of Japanese literature and art. I was fortunate to find in Count Kuroda a real enthusiast in my subject, and he gave me much valuable information as he was the nephew of Baron R. Kuki, who was instrumental in shaping the policy of the nation in this matter. He was a contemporary of the builders of Modern Japan like Ito and Togo, and like them he was sent to the West for specialisation. On his return to Japan, when he rose to the rank of the Privy Councillor, he drafted the Memorial on the Conservation of National Monuments, and introduced a Bill on the National Treasures. Already in 1889 the Imperial Household Department organised a Com-

mittee for the investigation of historic and art treatures in Buddhist temples and Shinto shrines. This led in 1897 to the establishment of a definite Code for the Protection of National Treasures and Historical Monuments. Meanwhile the Imperial Academy of Japan was founded stimulating the activities along these lines, and the Ministry of Education also helped the movement through its Department of Fine Arts financing the exploration of ancient sites as well as the exhibition of ancient and modern art objects. The taste for arts and antiquities is inborn in Japanese men and women, and naturally art objects are seen not only in the big Metropolitan Museum but also in private homes and isolated temples. The Museum Association of Japan is a growing institution; it publishes its bulletin and the directory of Japanese Museum for the benefit of those who do not understand Japanese. There are also journals like the *Kokka* and the *Year Book of Japanese Art.*

Tokyo has several museums and collections : The Oyama Institute of Pre-historic Research shows an important collection of neolithic potteries and stone implements which should be studied with the select specimens of pre-historic antiquities at the Imperial University of Tokyo. Some fine samples of Chinese sculpture and Japanese art are in the Okura Antique Museum. Japanese arms and armours of all ages are in the Yushu-Kwan Museum and in the Yamada collection. Japanese costumes, paintings, etc. are in the Mitsui collection. Chinese and Japanese paintings and sculptures are found in the Nezu and Miyama collections. The Nō costumes and Japanese pottery of different ages are to be found in the Fukui collection. The Waseda University founded by Count Okuma takes special interest in the drama, and has, therefore, developed a special Histrionic Arts Museum showing models, colour prints, etc., relating to theatrical performances. Japanese porcelain of different types are found in Shiobara and Makita collections. The Masuda collection offers important specimens of Japanese painting, sculpture, and industrial arts. Baron Ino Dan in his private residence has made a valuable collection of Japanese painting and folk arts and crafts.

After Tokyo, the historic city of Kyoto exhibits valuable art treasures. The biggest collections are in the Kyoto Onshi Museum of Art and also in the University Museum. Most valuable series of ancient Chinese bronzes are in the Sumitomo collection, which is so important that two eminent antiquarians like Prof. Hamada and Dr. Harada devoted several years of their life to publishing six volumes of plates with four volumes of introductory notes published as *Senoku-Seisho* (1921). This was utilized by Albert J. Koop in his *Early Chinese Bronzes* (1924). Chinese clay-figures, ancient

Korean tiles and samples of Buddhist arts are in the Ito collection. The Hashimoto collection shows fine samples of Chinese pottery and Japanese Buddhist sculpture.

In the provinces there are several important centres, the most important being the Imperial Household Museum of Nara, the Sosho-in and the Temple Treasures of Horyu-ji and the Reiho-kwan Museum on the Koyasan hills. The Osaka prefecture has yielded valuable arms, armours and neolithic implements deposited in Motoyama Shoin-Do Museum. The Ueno collection is near Osaka, as well as the Hakkaku Museum of Fine Arts, with metal work and Chinese and Japanese procelain. Valuable objects from Shinto temples are found in the Kokuho Kwan Museum of Kamakura. Historical relics of Shintoism are in the Choko Kwan Museum near the Ise shrine. Mr. Tomitaro Hara, who was the host of Dr. Tagore made a valuable collection in his residence near Yokohama. Valuable objects are also found in the treasury of the Nikko shrine. Most of the important temples and castles of Japan that have escaped the ravages of fire and war contain valuable objects of applied arts, mural decorations and cult objects which deserves to be carefully catalogued and studied. A co-ordinated inventory of all the scattered objects of art should be compiled and published in English for the benefit of the lovers of Japanese art who cannot utilise Japanese books or catalogues.

The Art Treasures of Horyuji

One of the earliest and most important monuments of Buddhism in Japan is the temple group of Horyuji, which was founded by the first Japanese Empress and her beloved nephew, the Crown Prince Uma Yado, whose honorific title was Shotoku Taishi. Founded in 607, its oldest sections have continued through 13 centuries. The entire group is divided into the eastern and western temples comprising about 27 separate buildings : four of the Asuka period, five of the Nara period, two of the Fujiwara period, nine of the Kamakura period, and seven of the Ashikaga and Tokugawa periods. It is a veritable city of temples, like the Delphi of Greece. The Buddhist sculptures and other objects of art, numbering 421 pieces in all, are listed as National Treasures. The iconography is specially interesting from the point of view of primitive Buddhism in Japan. The central figure in bronze is that of Sakyamuni occupying the southern side of the *Kondo* or the main hall. Buddha there is accompanied by two Bodhi-sattvas, and the whole group is called Shaka Trinity, erected about 621 by the son of Shotoku Taishi. To the east of this group is the Yakushi Trinity, *i.e.* Yakushi or

Bhaisajya-guru, Nikko or *Sūrya-prabha* and Gakko or *Candra-prabha.* The figures were executed by the order of Empress Suiko and Prince Shotoku. To the west of the Shaka Trinity we find the Amida Trinity composed of Amitābha, Avalokitesvara and Mahāsthānaprāpta. We find also among the minor deities the coloured wooden statues of Srī (Kichijoten) and Vaisravana (Bishamon or Tamonten). We also find the Four Dikpālas Guardians of the Quarters (Shi Ten-no or " Four Heavenly Kings ") occupying the four corners of the platform : Dhritarāstra, Virūdhaka, Virupāksa and Kubera. Samanta-bhadra was also worshipped as imparting long life to the devotees.

An image of Monju or Maitreya, the presiding deity of wisdom, is reported to have been introduced into Japan by a Hindu priest of royal descent, Subhakara-sinha, who also visited China between 716 and 723. A very famous object is the portable shrine, originally the property of Empress Suiko (592-628) which reflected the style of the Asuka period (552-645). On the portable shrine and its pedestal, which are both lacquered in black all over, is displayed the earliest examples of Japanese painting representing some Jataka stories, which are also to be found in the five-storied wooden pagoda built about 607. The life of Buddha is also partially represented in clay figures on the earthen pedestal at the centre of the first storey of the five-storied *stūpa.* The *Kofuzo* or Treasure House contains the precious objects donated by Prince Shotoku and sucessive sovereigns. This is the only surviving one of the 33 treasure houses reported to have been given to the Horyu-ji temple. In the eastern temple, there is a beautiful octagonal hall erected about 739 and called the Hall of Dreams which was named in memory of Prince Shotoku who is reported often to fall into a trance (*samādhi*) whenever he ran against incomprehensible passages while annotating his three favourite *sūtras* : the *Saddharma-Pundarika,* the *Vimala-kīrti* and the *Srīmala.*

The Hall of Dreams is also proud to possess the glorious wooden statue of the saviour Kunze-Kwannon or Avalokitesvara, one of the finest specimens of Far Eastern sculpture, with flowing robes, slim figures of perfect grace with hands holding the *Cintāmani* or Wishing-gem and with eyes beaming with mercy. Buddha's bone relics are deposited in the Shari-den. Another very precious image of wood is found in the Chuguji nunnery which treasures the oldest embroidery representing the *Mandala* of Paradise. It represents Buddhist images, palaces, birds, flowers, etc., embroidered on silk of purple gauze and of yellow damask woven with threads white, red, yellow, green, purple and orange, a veritable rainbow of tapestry. Another wonderful treasure of the nunnery is the image of Miroku or Cintāmani Avalokite-

svara of rare plastic dignity and mystic charm. Last, though not the least, is the collection of fresco paintings in the Golden Hall or Horyu-ji. The long band of mural painting is divided into twelve sections, four of which are somewhat larger than the rest, measuring about 10 ft. in height and 8½ ft. in width. These four bigger panels represent the paradise with a Buddha in the centre of each composition. On the eight smaller walls we see Bodhi-sattvas in standing posture. The method followed by the painters has been analysed. The outline of the figures was drawn first in red lines and afterwards shaded in the same colour. On the dry stucco finish of the walls, the following colours were applied : black, vermilion, rouge, ochre, cobalt and verdigris. Some secondary colours were also used, and the style strongly reminds of those from Khotan and Ajanta. Japanese experts mostly agree that the expression of the Buddhas and Bodhi-sattvas is distinctly Indian. The outlines of the body and the robe are coloured red, the symbol of life and activity, and in contrast the head and the lotus-throne are coloured green and blue which suggest the feeling of peace and harmony. These invaluable treasures of Eastern Asiatic painting have often been reproduced and recopied, and still a most carefully prepared publication on the Horyu-ji paintings is on foot for which the Government has paid a big subsidy.

Near Horyuji we find two important temples : the Toshodaiji with its dry lacquer images of Vairocana, and the wooden statue of the thousand-handed Avalokitesvara. So the Yakushi-ji temple contains the bronze statues of Bhaisajya-guru and of the Gakko Bosatsu or Candra-prabha.

Nara and its Museums

The sacred city of Nara with its shrines, images, festivals and deer park reminds us of the holy city of Benares. The gigantic Todai-ji temple houses the colossal bronze image of Vairocana. It is the main shrine of the Kegon (Avatamsaka) sect. The Todai-ji is considered to be the largest wooden building in the world. It was erected between 747 and 752 A.D. It was damaged several times and renovated towards the beginning of the 20th century, with the total expense of 75,000 yen.

The gigantic bronze image of Vairocana is 53½ ft. high, probably the biggest in the world. Its casting was begun in 743 and was completed in 749. The face alone measures 16 ft. by 9½ ft. and the whole figure weighs about 500 tons. The statue is seated upon a huge pedestal which is composed of 56 bronze lotus petals, each 10 ft. high. The bronze-caster Kimimaro was an expert from the Kudara province of Korea. In the dedi-

cation ceremony of the image, the whole royal family with the court officials and 10,000 priests and nuns reverentially participated. Apart from the huge statues in bronze, wood or lacquer, there are innumerable objects like the lanterns and the bell towers, testifying to the phenomenal growth of industrial arts in that epoch of Japanese Buddhism.

The Nara Museum

Some of the most valuable objects of early Japanese art are treasured in the Imperial Museum of Nara established in 1894. The exhibits are divided into groups of painting, sculpture, illuminated manuscripts and industrial arts, besides a valuable loan collection. Some fine statues of Suiko and Nara periods are treasured in the Museum. The later periods are also well represented. Some valuable paintings, earthen and porcelain wares, terra-cotta figures and other archæological materials are also exhibited.

Shosoin or the Imperial Treasury

When Emperor Shomu died in 765, the valuable art objects in his collection were noted down in catalogues and presented to the Todai-ji monastery of Nara, which built the simple treasure house in the log cabin style. About 3,000 art objects of rare historical value were thus preserved in this building of over 1,150 years old. They belonged to the epoch when Japan was getting from the continent the earliest relics of Buddhist art and culture. Pottery, furniture, wooden and leather boxes, lacquered or inlaid with gold, silver, ivory or different coloured wood, masks, musical instruments, textile fabrics, writing materials, documents and Buddhist scriptures are found in the Shosoin collection. About 50 beautiful bronze mirrors and their designs clearly show that they were of Chinese manufacture and superior to the mirrors of the Greeks and the Romans. But although most of these objects were foreign things imported from outside, many of them were made by Japanese artists. Even at that early age Japan was capable of assimilating and developing the various art motifs. Buddhism, of course, was the principle source of inspiration, and the Buddhist decorative designs are found inlaid on the sandal-wood *Vīnā* or lute, called *Biwa* in Japanese. Two *Kinnaras* or human-headed birds are finely depicted, and they are characterised by Japanese artists as the Buddhist sacred birds called *Kalavinka* coming from the Himalayas whose songs remind us of the music of the voice of Buddha. The importation of Indian musical modes into Japan was proved by the Prof. Sylvain Lévi in his paper on the "Lumbini Orchestra."

Some of the textile fabrics, nearly 70,000 of which have so far been mounted, in their designs, colours and technical porcesses prove them to be of Indian, Persian, Chinese or Byzantine origins or influences. Renowned Japanese art historians have collaborated to produce an excellent *Catalogue of Treasures in the Imperial Repository* (Tokyo, 1932). But they have only examined about one-half of the objects in the cases which are kept open for only 26 days in the year for airing and inspection. The public were allowed to visit the treasury from 1907 and in an inventory of 1908, the objects were classified under 2,794 items which grew to be 5,645 when a more exhaustive catalogue was compiled in Japanese by Mr. Y. Osima, a former President of the Imperial Household Museum.

In the same compound there is a small store-house, the *Shogozo,* which contains nearly 5,000 scrolls of the copies of ancient Buddhist *sūtras* : 22 scrolls copied in China in the Sui dynasty (581-617), 221 copied in the T'ang dynasty (618-906), 1,492 scrolls copied in Japan in the Tempyo period (708-781). The Repository contains many articles which were used in connection with the " eye-opening " ceremony of the Daibutsu which took place in 752, May 26. With a grand solemn ceremony the eyes of the great Buddha were opened by the priest Bodhisena who made the gestures of putting in the pupils of the eyes with *sumi* and brush and to the brush were tied long cords held by thousands of people. These objects are still to be found in the Shosoin. Buddhist figures are found carved on solid blocks of copper embossed on bronzes, and also painted on silk as well as on hemp and cloth. Not only Mahāyāna but Hīnayāna miscellaneous *sūtras* were preserved here, as we find from the inscriptions on the bamboo mat-cover called *Chitsu.* The names of some of the *sūtras* are clearly laid down, *e.g.*, the *Suvarn-prabhāsa,* the *Mahāvaipulya,* the *Brahmajāla* etc. Rosaries of lotus-seeds, rock-crystal, amber and glass are also found. Three-pronged Vajras (really Trisulas) are found as symbols of the irresistible power of prayer, meditation and incantation. Models of Buddhist pagodas of various styles are also found. The seeds of the Bodhi tree are also used as rosaries. Following the example of Asoka, Empress Komyo established here a sort of a charitable hospital for free distribution of medicine to the poor, and various kinds of jars and bowls for powders and ointments, minerals, medicinal fruits and herbs were treasured, probably following the Indian Ayurvedic texts. Coral beads are very scarce, and ebony is also rarely used. Ancient Japanese ornaments like the *Kuda-dama* (tube-jewels) and *Magatama* (carved jewels) have also been found. The cult of the mystic gem of India, *Cintāmaṇi* (*Nyoi-Hoju*) had already reached Japan.

Relics of Buddhist saints were called Shari (from Sanskrit *Sarīra*). Many objects of ivory have been found and the Shosoin collection as a whole deserves to be studied on a comparative basis from the point of view of the evolution of Asiatic arts and crafts. The textile collection has been exhaustively treated in two volumes with 114 plates published in 1929 by the Imperial Household Museum of Tokyo, and Dr. K. Dohi has published in English his " Study of Some Drugs Preserved in the Shosoin."

Kyoto Treasures

Kyoto having been the political and spiritual capital of Japan for centuries, its palaces and temples are veritable museums of Japanese arts and crafts. Some of the finest examples of painting and sculpture as well as illustrated manuscripts have been assembled in the Central Museum of Art (Kyoto Onshi), to the great convenience of those who cannot afford to visit separately the various collections in and about Kyoto. The museum was established by the Imperial Household and opened to the public in 1897. In 1924, when we had the privilege of visiting Kyoto, the museum was given over to the municipality of Kyoto. It is specially rich in painting and sculpture, many of which are marked as national treasures. The oldest style of painting derived from the Six Dynasties of China is represented by the illustrated manuscript of the Buddhist " Sūtra on the Cause and Effect." Although painted in Japan of the Tempyo era (729-748), the figures, costumes and other objects on the scroll represent the types of Northern China in the 6th century. Another richly decorated scroll of the 12th century illustrates the *Saddharma-Pundarīka*. Portraits of Seven Patriarchs are ascribed to the T'ang dynasty, five being painted by the great Chinese painter Li Chen (Ri Shin in Japanese) and two by Kobo Daishi. The story of the resurrection of the Buddha (taken from the 6th century Chinese translation of the *Mahāmāya Sūtra*) is the subject of a unique painting of the Fujiwara period. The Buddha is seen rising from a golden coffin and turning towards his mother, while angels and demons gaze in wonder. Unlike the Nirvāna representation we feel the atmosphere of joy and tenderness in this Japanese masterpiece. From the Kamakura period come the two pictorial biographies of Ippen Shonin and Honen Shonin, reflecting the style of the Sung paintings. Honen was the great protagonist of *Bhakti* in the Amitābha cult, and naturally we find a perfectly unique representation of the Amida Trinity. A picture of the wind and thunder deities is attributed to Sotatsu, and a powerful landscape of Sesshu represent summer and winter. Some

of the sculptures in wood and lacquer display rare genius and portraiture. A few Shinto deities are represented in Buddhist pose. Gold lacquer utensils and furniture come from the Kodai-ji temple erected by the wife of Hideyoshi, and some fine samples of Japanese industrial arts and mirrors with exquisite designs are to be found in the Kyoto Museum which has published a richly illustrated catalogue in 5 volumes. But a volume which I examined wistfully but could not bring to India was an album of Indian and Indo-Persian paintings deposited at the Kyoto Museum by some Japanese art-lover who undoubtedly travelled in India. The old bookshops of Kyoto, like the old shops for art materials, may offer to patient explorers many such interesting items which are seldom noticed in general books on Japanese art.

Another very important centre of the study of Far Eastern art and archæology is the Imperial University of Kyoto. It provides for the systematic study of pre-historic Japan and Korea and their relations with China and Manchuria. Several professors of the University took active part in excavation work, and developed thereby a valuable collection of antiquities which should be carefully examined. Prof. K. Hamada, later on the President of the University, was the leader of the Kyoto school, and during my last visit he helped me to get an idea of the activities of the Kyoto group for which I am grateful to him as well as to his learned colleague Prof. S. Umehara. The Archæological Institute of the University has published valuable reports, some of which I note down below : " Ornamented Tombs in Higo " (Hamada and Umehara, 1917) ; " Excavations of Neolithic Sites " (Hamada, Umehara, Shimada and Suzuki, 1918) ; " Excavations of Shell-mounds " (Kiyono, Sakakibara, etc., 1920) ; " A Pre-historic Site at Ibusaki " (Hamada, 1921) ; " Ancient Sepulchre at Midzuo " (Hamada, Umehara, 1923) ; " Rock-cut Buddhist Images in the Province of Bungo " (Hamada, 1925) ; " Remains of Ancient Bead Workers " (Shimada, Umehara, 1927) ; " The Pre-historic Site in Suku and a Study of the Ancient Mirrors " (Shimada, Umehara, 1930) ; " Study on the Cairns on Mount Iwaseo " (Umehara, 1933).

Prof. Hamada was a veteran archæologist who during his studies in Europe worked with Sayce, Petrie and such eminent Orientalists. Prof. Umehara after his studies in Europe passed through Ceylon, as he told me, and he takes keen interest in Indian art and archæology. He is an indefatigable worker publishing both in Japanese and in English. He takes deep interest in China and Korea, as I gathered from the translated title of his Japanese monographs : " On the White Earthen Pottery from the Ruins of Honan," " Copper Cutleries in Ancient China," " Report on the Excava-

tion of the Ancient Tombs near Keishu, Korea." Prof. Umehara very kindly took me through the valuable collection of the University Archæological Museum (opened in 1914). I found the exhibits scientifically arranged : the pre-historic potteries and the stone implements of Neolithic Japan; clay-houses and Haniwa figures from the Tumulus period; neolithic implements from Kansu (China) and from Jehol (Manchuria); neolithic relics from Korea; Korean tomb bricks and tiles; ornaments and crown jewels of the Korean royal house; terra-cotta Buddha figures from Korea and Manchuria; relics of the Nara period; and many such valuable archæological remains.

The Imperial Household Museum, Tokyo

This Museum, the biggest and one of the earliest in Japan, was organised in 1872 and opened to the public in 1882. It has several departments managed by a Chairman-Curator attending specially to the Department of Fine Arts. So, special authorities on Japanese art supervise the departments of Painting, Sculpture, Ceramics and Lacquer. Jiro Harada, specialist in the history of Japanese art who returned sometime ago from a lecture-tour through America, has published recently a splendid album on the treasures of the museum. Another renowned art-critic attached to the Museum is Dr. Yukio Yashiro. He gained international renown by his magnificent volume on Botticelli in which he conclusively proved that many of the artists of European renaissance were familiar with the art of the Far East. He is also the Director of the Institute of Art Research of Tokyo. Returning recently from his English lecture-tour, Dr. Yashiro expressed his regret that with the exception of the Boston Museum of Fine Arts and the Freer Gallery of Washington, very few museums outside Japan show real interest and judicious selection. The Western minds associate Japanese art with the realistic colour prints, which, however, in spite of their excellence, cannot be taken as representative of the varied beauty and grandeur of Japanese art, which is occasionally realistic but mainly symbolical and decorative. "Living in a beautiful country where nature seems decorative, the Japanese people find the sensuous stimulus of ornamentation indispensable to their life. The Japanese sense of the decorative again has two sides : the gorgeous and exciting on the one hand, the simple and silent on the other. These elements appearing with surprising alteration constitute the special enchantment of the decorative art of Japan." China, that melting- pot of Far Eastern culture, was no doubt the land of origin, but for that very reason Japan should not be neglected as merely the land of derivative and later develop-

ments. For Japan within her shorter historical existence, while drawing from continental sources, nevertheless made her own developments embodying the national character of the race. Japan, according to this recent interpretation of Dr. Yashiro, is ever representing the incomparable beauty of the land and thereby contributing richly to the art of the world. These observaions of the Japanese art-critic should be kept in mind by all those who are privileged to study the masterpieces of Japanese art in a central museum like that of Tokyo.

The magnificent collection of the Tokyo Museum is administered along with the Museum of Nara, the Shosoin and the Shogozo. All these are managed by the central governing body of the Imperial Household Museums. In the case of the special collection of the Shosoin, separate rules are framed for the classification and special inspection of the art objects. For the Nara Museum special provisions have been made for field inspection and tours, repairs of national treasures, publication, gallery talks, installation of exhibits, extraordinary exhibitions, etc.

The Imperial Museum of Tokyo has several departments, as we have noted above, attending to various administrative duties like accepting and returning loan-exhibits, loaning out objects, special exhibitions, lectures, publications, museum library, conservation and repairing of national treasures, field-work and tours, exhibition of excavated objects. The curators meet regularly whenever questions of purchase, donation or accession in the three major departments of Historical Records, Fine Arts and Applied Arts arise. Some rare pre-historic Haniwa male and female figures and other objects excavated in the Tochigi and Gumma prefecture are exhibited, together with terra-cotta models of contemporary dwelling houses. The clay-modelling tradition continued till the Buddhist epoch, for we see fine specimens of 300 Buddhistic clay-figures found near Dai-nichi-do in Nikko. Some of the sacred robes are of wonderful workmanship and design. The bronze objects and ceramic specimens from China are remarkable. Some of the finest wood-carvings and dated paintings make the Museum of Tokyo a veritable shrine of spiritual beauty : the Bodhi-sattva of all-pervading wisdom (Fugen) and the Sākya-muni of Fujiwara period, Sung landscapes, animal caricatures of the Kamakura period (1186-1333), such as a large monkey wearing the costume of a Buddhist monk and arguing with a big frog sitting on an altar in the posture of Buddha. Of the same period are the pictures of arrogant monks and hungry devils, the latter attributed to Tosa Mitsunaga. We see also a concentrated nature study of Sesshu (1420-1506), the Zen priest who was the founder of the Yunkko school and one of the

great landscape painters of Japan. When he was 77 years old he painted "Priest Eka Cutting his Arm" which is a national treasure. A gorgeous landscape by Motonobu, "Three Laughers in the Tiger Valley" by Kano Sunraku, "Dragon and Cloud" by Okyo, and illustrations of the Japanese romance Ise Monogatari by Korin are some of the masterpieces in the huge collections of the museum. Art objects and furniture in metal and lacquer as well as the ceramic collection are so big that one can only follow them with the help of an expert, and in this connection I must remember with thanks Dr. Jiro Harada who was all attention to me during my stay in Tokyo in 1937. Harada was for the present writer a "friend, philosopher and guide" all in one. Within the museum with its bewildering variety of art objects he was an invaluable guide. But no sooner did he finish the description of the objects than he plunged into the realm of the subjective, making us realise the philosophy of the art phenomenon. And when he found his guests fatigued with the analysis of objects and subjects, he took his tired guests into a reposeful Japanese restaurant to enjoy with him a freshly cooked Japanese meal which helps so much in assimilating the lessons of Japanese art. In discussing the wonderful lacquer objects Prof. Harada gave copious details about the distribution of lacquer from Siam to Japan. He informed us that lacquer wares of the Han period (1st century B.C.) have been excavated at Lolang, Korea, by Japanese scholars who found them undamaged after 2,000 years. He showed us with just pride the two writing-box lids, designed by the great artists Koetsu (1568-1637) and Korin (1659-1716), real gems of Japanese industrial art. In dealing with the ceramic objects, Harada confided to us that some of the tea utensils fetched for each piece 4,000 yen, while big-size bowls were sold for between 165,000 to 180,000 yen. The *Cha-no-yu* or Tea Ceremony taught the people to adore the beautiful in the everyday life, so much so that the feudal lords of medieval Japan "would exchange their castles for a single tea-caddy of a simple glaze." Ceramic art was possibly imported from China, but it was given a rare dignity by the Japanese. Japanese genius in sculpture is best represented in the wood-carvings, as well as in the Gigaku and Nō masks carved in wood and coloured afterwards. In 612 a Korean Buddhist priest introduced a form of musical performance called Gigaku, where masks were used, and in carving them marvellous skill was shown—specially in the Tempyo era (710-784), the Golden Age of Japanese Sculpture. Later on the more introspective Nō drama came into vogue, showing a symbolical type of masks which were often superior to made-to-order sculptures. The Tokyo Museum treasures a gilt-bronze

Buddha image and Amitābha with attendants in copper repoussé, both belonging to the Nara period (646-781). The founder of the Nara culture, Prince Shotoku (572-621) was the patron saint of all branches of national art. His remarkable portrait from the Imperial Household collection is now in the Tokyo Museum. Zen Buddhism is represented by the remarkable monochrome landscape by Shubun (1394-1427), who paved the way for great artists like Sesshu and Masanobu. From the work of such old masters we are taken through the picture gallery to the landscapes of modern painters like Hashimoto Gaho (1825-1908) and Kawabata Gyokusho (1842-1913), showing the continuous tradition of Japanese pictorial art, which transmitted some of the profound traits of Esoteric Buddhism. What was religion and philosophy in India came to be visualised in Japan, thanks to the artistic genius of the people. Buddhism joined hands with Taoist mysticism in order to train this highly gifted race of Nippon about whom Dr. Harada has made the following profound observations : " The highest aim of the painter in Japan, as was the case in China also, has been to represent everything he painted in its right relation to the Infinite. Yes, that has always been the supreme aim of our painters. Whatever they painted, be it a human figure, an insect or a plant, they have tried, not only to depict the thing itself but to suggest or imply also its relative position in the scheme of the Universe, revealing it, however trifling in form, as in right proportion to the Infinite. Not only in painting but also in other forms of the art of Japan—such as sculpture, landscape gardening, tray landscapes, designs in pottery or lacquerware, or even in flower arrangement—this supreme aim manifests itself . . . . it is this spiritual rhythm or rhythmic vitality which has been the supreme aim of Eastern artists for many centuries past."*

* Jiro Harada—" A Glimpse of Japanese Ideals," Tokyo, 1938.

V

Art and Archaeology of Japan

THE individuality of the Japanese genius in the domain of arts is an admitted fact to-day, though some writers would appear to exaggerate its derivative character. But even there Japan showed the strength of her limitations by conserving clear traces of the sources from which she derived suggestions and inspirations of art from age to age. Thus consciously as well as unconsciously Japan was serving the cause of Oriental Art as its loyal and painstaking art historian, and that tradition she carried down to our modern days. For in no other Oriental country do we find the same ardour for and organised study of Art on a nation-wide scale. I shall try to demonstrate this by referring to Japanese institutions and publications which were brought to my notice by the Japanese scholars. We are thankful to Yutaka Tazawa of the Department of Education, Tokyo, for publishing recently heaps of precise information in his "Orientation in the Study of Japanese Art," in the volume on *Japanese Studies*, published by the Kokusai Bunka Shinkokai (Tokyo, 1937).

Drawing as she did the main inspiration of art from Buddhist China of the T'ang period, Japan has conserved the most valuable pictorial documents of this epoch in the Horyuji frescoes. These remained, till the recent discovery of the Tun-Huang paintings, the most important link between the Buddhist art of India and that of the Far East. Innumerable art treasures and traditions of the Sung, the Yuan and the Ming schools were faithfully preserved from destruction by the Japanese admirers. Already in the 11th century Japanese romance the *Genji Monogatari* we find critical discussions on painting, and such criticism occurs also in a 13th century compilation. These were most probably influenced by the art studies of the Sung scholars, as we find from two valuable Chinese publications of the 11th and the 12th centuries : Lu Ta-lin's "Illustrated Treatise on Antiquities" in 10 vols. (*K'aoku-t'ou*, 1092 A.D.) and Wang Fu's "Illustrated Record of Antiquities in the Hsuan-ho Palace," in 30 vols. (*Pö-ku-tu-lu*, 1107 A.D.). In 1751 was published in 42 vols., the "Survey of Antiquities in the Hsi-Ching Palace" (of Emperor Chien Lung) and while the Chinese and the world at large cared little about these valuable sources of Far Eastern art, the Japanese published an abridged edition, the *Seisei-Kokau* in 1892.

From the 17th century onwards, writings on the lives of painters and essays on painting greatly increased in number, and, as in the Sung and Ming periods, veritable dictionaries on painting came to be compiled by persons who were antiquarians, artists and historians. Two such outstanding works are *Fuso Meiga Den* and *Koga Biko*, the latter completed about 1850. When the Tokyo Imperial Museum was instituted in 1872, we find two American scholars invited to collaborate with the Japanese. Prof. E. S. Morse started with the pre-historic antiquities of Japan, and finished by taking over to America the most remarkable collection of Japanese pottery now in the Boston Museum. So in 1878 came Prof. Fenollosa, who inaugurated a national movement in art in collaboration with Okakura who started the magazine *Kokka* in 1889. In the same year was established the National Treasure Preservation Board. In 1912, the *Epochs of Chinese and Japanese Art*, a posthumous work of Fenollosa, was published. So the valuable studies and criticisms of Okakura were published (1922) in his collected works *Tenshin Zenshu.*

With the progress of the technique of reproduction, specially of photography, there began to appear a series of documentary studies on art : " The Selected Relics of Japanese Art " (*Shimbi Taikan*, 1899-1908, 20 vols.) ; " Selected Masterpices from the Arts of the Far East " (*Toyo Bijutsu Taikan*, 1909-1911, 16 vols.) ; " Catalogue of the Art Treasures of Horyu-ji " (1913-18, 64 vols.) ; " Catalogue of the Art Treasures of the Temple of Nara " (77 vols.)—such are some of the monumental publications of art-loving Japan. On the occasion of the Anglo-Japanese Exhibition of 1910, the Department of Home Affairs arranged to publish a most comprehensive work " Japanese Temples and their Treasures," in which the best Japanese scholars collaborated. In 1913, the Tokyo Imperial University established a chair on the History of Art, with Dr. Seichi Taki as the first professor. He as well as Dr. T. Sekino not only furthered the cause of art study in Japan but ungrudgingly helped foreign scholars in their studies on Far Eastern Art, as often acknowledged by scholars like Sirén and Waley. Dr. Sekino's researches are in the domain of architecture and sculpture, while Dr. Taki, who retired from the University in 1934 but is still editing the *Kokka* which he took up from Okakura in 1901, is a veteran authority on many departments of art both ancient and modern. His writings show a rare combination of synthetic treatment and descriptive survey, and his articles on sculpture and painting are quoted widely. Liwe him Prof. Toyozo Tanaka of Keijo Imperial University shows a profound knowledge of Chinese literature and painting. Similar tendencies of synthetic treat-

ment are noticeable in the studies on Sino-Japanese architecture by Dr. Chuta Ito, and in the department of ceramics and industrial arts by S. Okuda.

Early Japanese art, both sculpture and painting, is intimately connected with Buddhism. To ensure the precise dating of Buddhist sculptures, the Archæological Society of Japan published a very valuable work, "Inscriptions on Buddhist Images." Several Japanese scholars applied themselves to the study of Buddhist iconography. The importance of the subject is manifested from the fact that the huge Taisho edition of Tripitaka (edited by Dr. Takakusu and Prof. Watanabe) devoted 12 volumes to iconography, A pioneer in this branch of study is Prof. Seigai Omura who lectured at the Tokyo school of Fine Arts, and, being well-versed both in Chinese and Japanese documents, Prof. Omura promoted researches into the history of Chinese art and the development of Tantric religion (Mikkyo Hattatsu-shi) and published representations of iconography in "Relics of Old Buddhist Paintings" in 18 volumes. Prof. Omura's work was supplemented by Dr. G. Ono, and also by T. Naito who published his "History of Japanese Iconography" (1933) and the "History of Japanese Buddhist Painting" (1934), tracing it back to the original sources of China, Central Asia and India. Another profound scholar in this line is Prof. Toyozo Tanaka of the Keijo Imperial University who emphasies the historical and comparative treatment with reference to Chinese and Indian Buddhism. Prof. T. Minamoto of the Kyoto Imperial University studied the pre-Kamakura Buddhist paintings. The Yamato-ye (chiefly picture scroll) of the 12th and 13th centuries, the Kanga (based on the Sung and the Yuan styles) of the 15th and 16th centuries, the screen painting of the second-half of the 16th century are being vigorously studied. The Tokugawa period of art (17th and 18th century) represented by the Kanga, the Ukiyo-ye and other forms of popular art, is also finding enthusiastic admirers. The Bureau of Historiography in the Tokyo Imperial University as well as its prehistoric department fosters researches in various departments of art and archæology. So Dr. Kosaku Hamada (whose untimely death we are regretting) developed under his expert guidance a new school of Japanese art and archæology in the Kyoto University. The Department of Education, Tokyo, is also helping the progress of art studies by appointing Mr. S. Maruo as the appraiser of the National Treasures and Mr. T. Myochin to be in charge of repair work and conservation. Both the scholars have published valuable studies on Buddhist sculpture. The department has also sponsored the studies on temple architecture by one of its officers,

Minoru Ooka.* Recently several scholars are devoting their attention to the Japanese black and white paintings and its relation to the Sung and Yuan schools. Prof. R. Fukui of the Tohoku Imperial University is an authority on the paintings of the 15th and the 16th centuries, studied also by S. Wakimoto of the Taisho College.

The cause of art, however, is not exclusively furthered by specialists, for we see here in Japan as elsewhere, a group of amateur art historians who helped in diffusing art ideas and publications on a large scale. Dr. S. Fujioka's " History of Modern Painting," published in 1903, marked an epoch by initiating a comparative study of Japanese literature and painting. He traced also the influence of social conditions on painting from the 17th to 19th centuries. Equally inspired by literary interest Dr. R. Takayama published in 1914 *A History of Japanese Art* which exerted tremendous influence on the public. A similar book by Dr. T. Watsuji is entitled *Pilgrimage in Ancient Temples* (1919). There he discusses the merits of Buddhist art in the 7th and 8th centuries with reference to the social and cultural back-ground of the time, tracing their origin to arts of China, India and Greece.

Owing to the influence of the Shirakaba school, European art came to usurp the attention of the younger generation. But a significant change came after the great earthquake, and most of the learned magazines of Japanese art, published after 1924, started their study from the ancient Buddhist arts. The *Kokka* of Tokyo, of course, was the oldest monthly journal, founded in 1889. In 1910 the Archæological Society of Tokyo published *Archæological Review.* In 1921, the *Bukkyo Bijutsu* (Buddhist Art) was published by Prof. T. Minamoto of the Kyoto Imperial University. Between 1924 and 1930, three art journals came to be published somewhat irregularly from Nara, thanks to the enthusiasm created by Dr. Watsuji among the young monks of the temple. The *Toyo Bitjutsu* (Oriental Art) was started in 1929 from Nara, and in 1931 Kyoto art lovers began to publish two journals on the historic remains and arts.

Art research proper is fostered by (1) The Oriental Ceramic Research Institute, Tokyo, (2) The Ancient Cultural Research Institute, Tokyo, (3) The Fine Arts School, Tokyo, and (4) The Institute of Art Research, Tokyo, the last publishing, from 1932, its *Bijutsu Kenkyu* or monthly Journal of Art Study which encourages young scholars to base their observations on

* The department is publishing since 1923 a complete illustrated catalogue of the National Treasures of Japan.

concrete documents. Each number of the Journal publishes excellent photographic reproduction of art objects, together with quotations from or reprints of relevent documents as materials for study. Thus the *Bijutsu Kenkyu* of the Institute of Art Research directed by Yukio Yashiro, together with the *Kokka* and the Quarterly Report of the Japan Fine Arts Society, furnished us with the most authoritative studies on art in contemporary Japan.

The Department of Education, Tokyo, maintains several organisations for the preservation and examination of art objects. With Marquis Moritatsu as chairman, the National Treasure Preservation Board attends to the collection of Paintings and Sculptures, Applied Arts, Swords and Arms, Architectural specimens and Historic Monuments. So the Committee for Preserving Important Specimens of Fine Art works under its learned chairman Seichi Taki. The Bureau of Religion also attends to the conservation works through the National Treasure Appraisement Section financed by the Department of Education. Such official initiatives apart, there are many rich and influential non-official organisations furthering the cause of art and archæology, as we found in the case of the missions of Count Otani and of the University in Kyoto named after him. Art lovers and collectors in their personal capacity have sunk enormous fortunes to acquire valuable objects. Through the study of Japanese architecture many engineering colleges and technical schools have come to organise courses on art and architecture, as we see in the Imperial Universities of Tokyo and Kyoto (Engineering Department), the Waseda University and the College of Technology, Tokyo. Regular professorships in art are instituted in the Imperial Universities of Tokyo, Kyoto, Tohoku, Keijo, Kyushu, and also in the Koyasan College, Komazawa College, Kokugakuin College and Waseda University. Many other colleges have regular lectures, making substantial contribution to art and archæology.

It is necessary in this connection to remember the valuable work done by the Japanese Buddhist scholars whose solid contributions were described by Prof. Sylvain Lévi in his *Materiaux Japonais pour l'Étude du Bouddhisme* (1927). Outside the big Imperial Universities Prof. Lévi found excellent arrangements for the study and research into Buddhism and Indian culture, provided by several free institutions, religious and secular. In the latter group may be placed the big Keio University under its learned President Koizumi; the Free University of Nippon (Tokyo) where Prof. Nagai lectured on Indian Philosophy; the Free University of Toyo and the Taisho-Daigaku where Dr. J. Takakusu works with rare devotion backed by his learned colleagues. So the Raissho-Daigaku at Osaka, the Komazawa Daigaku

near Tokyo, the Ryukoku University and the Otani University in Kyoto, the Koyasan University, among several others, are veritable nurseries of scholars who through their studies and researches are bringing cultural Japan and India nearer from day to day. The greatest achievement of the Japanese Buddhists is the completion of the Taisho edition of the Buddhist Tripitakas, edited by Prof. J. Takakusu, Prof. K. Watanabe and Prof. G. Ono. It is completed in 100 volumes with 1,000 pages in each; 85 vols. devoted to Chinese Buddhist texts; 12 vols. to Buddhist iconography; and 3 vols. to the general and comparative index of authors and subjects. Thanks to the hospitality of Prof. Dr. Takakusu, I could watch from his quiet home in Tokyo the progress of this grand edition through the devoted collaboration of his friends and pupils who handled the Indian, Chinese, Korean and Japanese texts, including the latest Buddhist Mss. and fragments discovered in Tun-Huang. Prof. Takakusu also collaborated with Sylvain Lévi and Paul Demieville in publishing the Encyclopædic Dictionary of Buddhism (*Hobogirin*) under the patronage of the Imperial Academy of Japan. The Academy contributes generously towards researches in art and archæology. The Asiatic Society of Japan since 1872 and the Japan Society of London since 1895 are also making valuable contributions through their *Transactions*.

Far Eastern Art and Archaeology : Bibliographical Note

In course of previous discussions we have occasionally referred to Japanese publishing activities. But most of the publications being in their national language, the outside world, except a few specialists, generally ignore them. Books in European languages reflect imperfectly and often distort the rich contents of the native publications of Japan, as of China, India and other Oriental countries. A most necessary corrective in this field has been fortunately supplied by the Kokusai Bunka Shinkokai which is now publishing classified lists of works written in Japanese as well as in Western languages on Japan and the Far East. In their Bibliographical Register we find not only the publications on Japan but also on Asia in general, China, Korea, Manchuria, Mongolia, Siberia, Central Asia, Tibet, India and Burma, South Eastern Asia and Western Asia. Such a comprehensive programme of survey is not to be found in any other university or research society of Asia. So we are thankful to our Japanese colleagues for showing us the way, and we hope that their example would inspire the creation of a permanent Bureau of Asiatic Culture and regional committees of Asiatic

Bibliography. The history of civilisation, ethnography, religions, history, and archæology are studied in Japan systematically, and Japanese arts and crafts are surveyed from the point of view of painting and colour prints, sculpture and industrial arts, architecture and gardening, music, dance and the theatre. Thanks to the inborn love of art in the Japanese, they succeeded in rousing the interest of many distinguished Occidental art lovers. That is how we got valuable documented studies like those of Arthur Morrison (The Painters of Japan, 2 vols. 1911), of Fenollosa (Epochs of Chinese and Japanese Art, 2 vols. 1913), of Otto Kümmel (Die Kunst Ostasiens, 1922), of Serge Eliseev (La Peinture contemporaine au Japan, 1923-1925), and of Langdon Warner (The Craft of the Japanese Sculptors, 1936), among others.

Japanese scholars and publishers are no less active in exploring the field of art and archæology in China, Korea and Manchuria. We give below a brief inventory of valuable articles and studies by Japanese scholars : Problems relating to the Neolithic Age in North China (S. Mizuno), on the Copper cutleries in Ancient China and on the Funeral wares in Ancient China (S. Umehara), on the Propagation of Cowries in the Far East (N. Egami), Bodhi-Dharma : Historic remains at Sung Shan, Honan (J. Washio), Ancient Han tombs with Mural Paintings (S. Hamada), Ancient Chinese Mirrors in Europe and America (S. Umehara), a Collection of Photographs of Chinese Industrial Art (Teikoku Kogekai, ed.), a Collection of Photographs of Chinese Clay-figures (Otsuka Kogei-sha, ed.), Illustrated Catalogues of Ancient Chinese Prints (Bijutsu Kenkyu Shiryo, ed.).

Recently a subject catalogue of Chinese and Japanese books on Manchuria in the 24 libraries of Manchukuo have been published (Dairen, 1931). So the Tokyo Imperial University published between 1915-1931 in 12 vols., the Report of the Geographical and Historical Studies of Manchuria and Korea. The extremely rich collection of Chinese tapestries and embroideries treasured by the National Museum of Manchukuo has recently been studied and edited (Mukden, 1935, 2 vols., with 139 plates including 68 in colour, with texts and notes in Chinese, Japanese and English) by Prof. S. Okada and the late Mr. K'an To. So the Tokyo Institute of Oriental Culture have published illustrated volumes on Architecture and Buddhist Images of the Liao and Kin Dynasties. Similar catalogues (in Japanese) have been published of the Chinese paintings from the T'ang to the Ching dynasties, with over 300 illustrations. The Han and Pre-Han sites of Manchuria are being excavated by eminent Japanese archæologists like Hamada, Komai, Harada, Mori and Shimada, who are publishing valuable reports and monographs in *Archæologia Orientalis*. At the same time we find that the first

scientific expedition in Natural History to Manchukuo was organised by S. Tokunaga (1933).

Books and publications on Korea are very systematic and copious : The Governor-General of Chosen patronises the Art Exhibition Association of Keijo publishing (1922-1931) 10 vols. of Illustrated Catalogues of Korean Art; the Archæological Survey of Korea, 12 vols., 1915-1931; Illustrated Catalogue of Exhibits in the Museum of Keijo, 4 vols.: Archæological Report on the Excavation of the Ancient Korean Tombs (S. Umehara, Keijo Museum, 1934). The Keijo Imperial University also publishes many important things on Korean art and archæology, revealing the history of Man in Korea from the Neolithic Age down to the historical period, publishing, among other things, the Collection of Rubbings of Korean Inscriptions. The works of Japanese archæologists in Korea, Manchuria and the Far East must now be followed by all students of Asiatic History, and that is why Mr. G. B. Sanson, in the Transactions of Asiatic Society of Japan (December, 1929) gave " An Outline of Recent Japanese Archæological Research in Korea. " The Japanese scholars are going beyond China into Mongolia and Central Asia : Count Otani and Tachibana, led expeditions into Serindia, and Mr. Haneda collaborated with Prof. Pelliot in editing the Tun-Huang manuscripts deposited at the Bibliothèque Nationale of Paris.

Far Eastern Art in American Museums

The economic and political isolation of the Far East was put an end to by Commodore Perry's Expedition to Japan in 1853. Perry returned to U. S. A. with collections illustrating Japanese ethnology, because interest was roused in America " in the manners and customs of the people of the strange lands on the other side of the world. " Mr. Benjamin March, Curator of Asiatic Art at the Detriot Institute of Arts, traced this history in his useful book *China and Japan in our Museums*, 1929. He compiled this report for the third general session of the Institute of Pacific Relations (Kyoto, 1929) with the support of the Carnegie Corporation. He took us back to the very end of the 18th century, when in 1799 the Peabody Museum of Salem was founded. There were deposited miscellaneous objects of Far Eastern art and ethnology brought by the American merchant vessels. Chinese objects were brought to this Museum as early as 1801, and when, after Commodore Perry's expedition, American educationists were invited by Japan, two great collections were built up by Prof. E. S. Morse. He was invited to teach Zoology (1870) in the Tokyo Imperial University. He contributed some of the earliest papers on pre-historic Japan, and, before

retiring, he gave a most valuable collection of Japanese ethnology to the Peabody Museum of Salem and of Japanese pottery to the Boston Museum of Fine Arts which has published voluminous catalogues of great scientific value.

Another American scholar, Ernest Fenollosa, came in 1878 to teach in the Tokyo Imperial University. He was a man of rare intuition and enthusiasm, and he boldly argued to prove that the Japanese deserved to stand in the first rank amongst the nations of the world in the field of Fine Arts. He began to acquire Japanese paintings and prints, and with the expert help of Okakura developed the wonderful collections of Far Eastern paintings in the Boston Museum. *The Epochs of Chinese and Japanese Art* posthumously published, form a monument to Fenollosa's devotion to Oriental Art. Japanese and Chinese art were represented in the Centennial Exhibition of Philadelphia (1876), the World's Columbian Exposition, Chicago (1893), St. Louis Exposition (1904) and where for the first time the Chinese section received independent attention; in the Panama-Pacific International Exposition of San Francisco (1915) and in the International Exposition of Philadelphia in 1926. With wider publicity the American Museums awoke to the need of acquiring genuine treasures of Oriental Art, and although many mediocre or even faked objects crept into the museums through the trickery of rapacious dealers, yet the result was on the whole satisfactory. We agree with Mr. March when he says. " The ready availability of works of Far Eastern Art in the Western Museums has had a large share in raising the West's appreciation of Eastern cultural attainments." Chinese and Japanese art directly influenced the decorative art of Europe, and America was indirectly influenced through Europe.

That Chinese art is the mother of the Japanese came to be realised by Charles L. Freer who was a pioneer in the collection of Chinese Art in America. He was followed by two other eminent scholars Dr. B. Laufer and Dr. J. C. Ferguson who have written copiously on Chinese art archæology The Universities of Harvard, Columbia, California and Chicago, among others, have got special Chinese libraries, and in 1927-28 Mr. Arthur W. Hummel gave a new impetus as the chief of the division of the Chinese literature of the Library of the Congress, Washington. It has over 135,000 Chinese vols., 130,000 Japanese, 1,000 Korean and considerable materials in Manchurian, Mongolian and Tibetan. Thus China and Japan are the first two representatives of Oriental art and culture, securing their places in the museums and universities of U. S. A. (Vide *China and Japan in American Universities*, Chicago University Press).

The University of Michigan has a special Chinese collection in its Museum of Anthropology. About 6000 ceramic objects from the Sung dynasty downwards were recovered from Chinese burial grounds in the Philippine islands, explored by the Curator of the Museum. The Michigan Academy of Science, Arts and Letters publishes studies on Far Eastern subjects.

The Boston Museum of Fine Arts holds probably the richest and the most comprehensive collection of Far Eastern Arts. Its library of Chinese and Japanese books number over 28,000. Its Japanese collection goes beyond 88,000 and with its Chinese and Korean specimens nearly total 100,000. Prof. E. S. Morse served as the keeper of Japanese pottery, and he published an authoritative catalogue of his collection at the Museum in 1901. Prof. Fenollosa sold his collection of Japanese paintings to Mr. Weld, and it came to be the property of the Museum as the Weld-Fenollosa Collection. While serving as the Curator of the Department of Chinese and Japanese Art, Fenollosa brought in 1906 Okakura to the Boston Museum as an advisor. Later on he became a Curator and continued to enrich the Museum till his death in 1913. His place is now taken by Kojiro Tomita who is the Far Eastern colleague of Dr. Coomaraswamy, now in charge of Indian art.

The Fogg Art Museum of the Harvard University is fortunate in having as its curator Langdon Warner, a real enthusiast in Oriental arts who has made a substantial contribution to the study of Japanese Buddhist sculpture. The Museum has a modest but choice collection of Chinese and Japanese paintings, sculptures, bronzes and ceramics. Mr. Warner led two archæological expeditions for Harvard to Western China.

The Art Institute of Chicago has a rich collection of ancient bronzes and Japanese prints. Pottery of the Han and the T'ang period and a collection of Korean pottery are noteworthy. It is specially rich in Japanese prints numbering over 4000. Out of the 118 galleries of the Institute, 7 are devoted to Chinese and 2 to Japanese art. Its Buddhist Stele (551 A.D.) of the Wei Dynasty has been described in a special monograph by C. F. Kelley (1927).

The most remarkable and systematic Chinese collection (totalling over 12,000 items) is found in the Field Museum of National History, Chicago. Dr. Laufer built up this collection through his expeditions in 1908-10 and in 1923. While serving the Museum Dr. Laufer published a number of valuable studies : Jade (1912), Turquoise in the East (1913), Chinese Clay-figures (1914), The Diamond (1915), The Beginning of Porcelain

(1917), Sino-Iranica (1919), The Pre-history of Aviation (1921), The Chinese Gateway (1922), Oriental Theatricals (1923), Chinese Baskets (1925), Ivory in China (1925), The Giraffe in History and Art (1928). The Japanese collection of the Museum has been described in a series of leaflets by Helen C. Gunsaulus.

The Cleveland Museum of Art has a small but interesting collection of Chinese and Korean art : a T'ang dynasty mural painting of Buddha preaching, Wei dynasty stone sculptures, a Korean painting, and the head of a wooden Bodhi-sattava of the Sung period.

The Detroit Institute of Arts, Michigan, is under the care of Mr. Benjamin March, Curator of Asiatic Art. He made special study of Chinese and Japanese paintings, and mentioned, as special items in the Museum, a 13th century Chinese water colour by Ch'ien Hsuan, a large Chinese Buddha-head in wood (12th century), a screen painting attributed to Korea, and about 1,000 Korean specimens, and samples of Japanese textiles from the 14th to the 19th century. Between 1919-1929, the Museum spent over $94,000 in purchase of Chinese and Japanese materials. In California the Mills College for girls has built a decent art gallery with Chinese and Japanese objects valued at $14,000. Moreover, the college sponsored lectures, on Oriental art and history, of T. Kawasaki, Dr. and Mrs. J. H. Cousins and others.

The Museum of History, Science and Art, Los Angeles, has a respectable collection and has published bulletins from time to time. The South West Museum of Los Angeles developed under the direction of Mr. James A.B. Scherer who spent about seven years in the Orient and published several books on Japan.

The Yale University School of Fine Arts has a very good collection of Chinese porcelain collected by Mr. and Mrs. Williams in Peking between 1857 to 1876 when they were attached to the U. S. A. legation. We find also a group of Chinese, Japanese, Cambodian and Siamese sculptures, bronzes and paintings. The American Museum of Natural History has a rich collection of Chinese and Japanese objects, specially Chinese pottery of the Han dynasty described by Dr. Laufer (1909). The Museum financed the important expeditions under Dr. Roy Chapman Andrews to Mongolia.

The Metropolitan Museum of New York has a representative collection of ceramics, jades, sculptures, bronzes and paintings from China, Japan and Korea. The Museum invited lectures on Far Eastern Art—by Baron A. von Staël—Holstein, on the Temples of Compassion and Peace; by Prof. Paul Pelliot, on Iranian Influence on Chinese Buddhist Art; by Carl Whiting

Bishop, on Ancient Bronzes; by Benjamin March, on the Third Dimension in Chinese Painting; and by the present writer, on Indian Influences on Far Eastern Art.

There are a few special collections in New York, like the distinguished collection of Chinese paintings, bronzes and potteries made by Mrs. William H. Moore. Mr. and Mrs. John D. Rockefeller, Jr. also have a valuable collection of Chinese porcelain, bronzes, paintings and sculptures. The New York Public Library has the famous Brinkley Collection of 1,517 pieces of Japanese prints.

The Pennsylvania Museum of Art is rich in Chinese collections of the Han, T'ang and Sung periods. A remarkable group of Eastern Wei marbles was purchased from the Oswald Sirén collection. In 1929, the Museum purchased some 300 Chinese paintings from the splendid collection of Dr. V. G. Simkhovitch. The Museum spent (1928-29) about $42,000 in developing its Chinese collection, and $60,000 for Japanese purchases.

The University of Pennsylvania has developed a select and valuable collection in the Far Eastern section of its Museum. It spent a large sum in developing the Chinese collection : Chou dynasty bronzes, Han wine-jars, a pair of life-sized *Bhikshus* of the Sui dynasty, T'ang sculptures, Turfan fragments from the Von Le Coq expedition, and also art objects of the Sung and Ming periods.

The Princeton University is developing a Far Eastern collection in its Museum of Historic Art. The Rhode Island School of Design has over 2,000 items of Chinese and Japanese art which are used extensively by the students of the school. The school invites lecturers from outside and arranges gallery talks on the art of the Far East. The City Art Museum of St. Louis, Missouri spent about $300,000 on its Chinese and Japanese collections.

The Toledo Museum of art has a valuable collection of Chinese and Japanese ceramics, paintings and swords. It arranges a course of lectures on the Art of the Orient recognized by the University of Toledo.

Worcester Art Museum is located in Massachusetts and has collected a few select Chinese, Korean and Japanese materials, chiefly from the point a view of decorative arts, the textile collections being fairly extensive. Moreover, the Bancroft collection of about 2000 Japanese prints, catalogued by Mr. F. W. Gookin, includes some unique Japanese primitives. There is also a miscellaneous collection of jades, lacquers, enamels, bronzes and jewellery.

Lastly, in the capital city of Washington we find some valuable collections in the United States National Museum, Smithsonian Institution.

Commodore Perry brought in 1853 some specimens to illustrate the economic life of Japan, specially ceramics and lacquers which we find here. The Japanese Government later on presented to the Museum an industrial series and groups in costume. The technology of Japanese wood-block cutting is illustrated in the Division of Graphic Arts. The exhibits of Japanese musical instruments and of pre-historic archæology are also noteworthy. The Chinese collection is mediocre, but some ancient grave-ceramics were collected for this Museum by Rev. D. C. Graham in Szechuan. *The Annual Report of U. S. National Museum* is publishing occasional bulletins on Chinese and Japanese art and culture.

The Library of the Congress, Washington, has in its Print Division over 2000 items illustrating the Graphic Arts of Japan and China. The collection originated with the Division of Prints organised in 1897 and was enriched in 1905 by the gift of the Noyes Collection of Japanese prints, drawings etc. which have been catalogued. The works of Utamaro, Kuniyoshi, Hokusai and others are represented. Of the Japanese silk paintings there are the " Eight Views of Fuji " by Hiroshige.

The Freer Gallery of Art collection is the most valuable and is carefully catalogued by its able Curator J. E. Lodge. According to him, up to 1929, there were 3,429 Chinese, 1,862 Japanese and 455 Korean objects, chiefly painting, sculpture, ceramics, metal pork, textiles, jade, glass, etc. The collection originated with Mr. Charles L. Freer of Detroit, who began to collect about 1,880, coming under the influence of Fenollosa. Retiring from business in 1900 Mr. Freer devoted his energies in exploring China which was the original source of the Far Eastern art creation. It is mainly due to him that the American attention was diverted from Japan to China, and when the Government agreed to care for and maintain the collection at public expense, Mr. Freer made a gift (May, 1906) of his precious collection to the nation and created an endowment not only for the expansion of the Oriental sections of his collection but also for furthering scholarly researches on the subject. The year he completed the building for the collection, he died, and the Gallery was opened to the public in 1923. The motive behind his collection is best illustrated by the following extract from the Official Report : he believed " that the more nearly a cultural object of any civilisation expresses the underlying principles of artistic reduction in soundness of thought and workmanship, the more nearly it takes its place with other objects of quality produced by any other civilisation; and with that in view, he was intent upon bringing together such expressions of Western and Eastern cultures as seemed to him to embody

at their best those characteristic which he believed to be inherent in all works of art."

Montreal (Quebec) and Toronto are the two cities of the Dominion of Canada which possess some valuable collections. About 80,000 volumes of Chinese texts, specially rich in Ming works, formed the Best Chinese Research Library in the McGill University of Montreal. The Art Association of Montreal founded in 1860 developed in 1916 the Far Eastern Wing of its Museum. Chinese paintings, sculptures, tomb figures, textiles and ceramic specimens together with Japanese art objects of real value form the main collection enriched in 1927 by the gift of the Japanese ceramics and bronzes from Lord Strathcona.

The Royal Ontario Museum of Archæology, Toronto, contains the most valuable specimens of the mortuary art of China; Neolithic hand-made potteries, early painted wares, metal objects, weapons and implements, early bronzes, ritual vessels excavated near Honan-fu and other objects of the Chou period, Han dynasty metal work, Sung and later copies of early bronzes, glazed T'ang figures, tomb figures of the Ming dynasty, iron-figures of the Ming and Ching dynasties, Sung paintings and textile objects, and collection from Ming to the Modern times. These rare specimens go to make the Toronto collection the most important one in Canada. The Museum is associated with the University of Toronto, and funds were supplied to enable two expert collectors to acquire valuable objects : Dr. George Crofts and the Right Rev. W. C. White, Bishop of Honan, were responsible for this unique collection which affords ample opportunity for research and which are reported in the bulletin of the Museum.

Thus we find that the New World is taking greater and greater interest in the art and culture of Asia.

CONCLUSION

I

Pre-history and Proto-history of Asia

In course of our survey of the Indo-Pacific domain we were repeatedly confronted with the problems of Man in Asia. A new chapter in the study of Asiatic pre-history was opened with the discovery in 1890 of the *Pithecanthropus Erectus* or the Java Man by Eugene Dubois. The fossil mammals that were discovered by him along with the Trinil Skull were placed by Dubois as early as the Pleistocene age. But he changed his opinion with regard to the actual skull, which he supposed was that of an anthropoid ape allied to the gibbon and not of a man. But his original theory has been confirmed by the eminent Dutch Palæontologist G. H. R. von Koenigswald (*A Review of the Stratigraphy of Java and its Relation to Early Man*, 1937). After a searching scientific analysis of the materials Dr. Koenigswald came to the significant conclusion that the age of the Trinil culture was Middle Pleistocene, and that it was preceded by an earlier culture represented by *Homo Modjokertensis* whose fossil bones have been discovered near Modjokerto, west of Surabaya. He further added that the fauna as well as the stone implements of Java of these epochs and of the Siwalik and the Narbada valley " will make for good correlations between the Pleistocene of Java and India."

In 1931, the late Mr. C. ter Haar of the Dutch Geological Survey discovered various remains of fossil men near Ngandong on the Solo river. This new Solo Man is reported to show the greatest affinities to the Rhodesian Man from South Africa. Thus not only the fossil bones but the stone implements also show a wide distribution of early human cultures extending from South Africa to Java; and although the so-called Australoid Wadjak Man of Dubois has not been admitted as coming from the Pleistocene age, yet a similar Australoid population of the Neolithic period is now known to have connected Java with Australia.

In the light of these discoveries we may read profitably the paper of Prof. D. S. Davidson of the University of Pennsylvania (*The Antiquity of Man in the Pacific and the Question of TransPacific Migrations*, 1937). He opines that towards the end of the Pleistocene age with its characteristic fauna the *dingo*, the Proto-Australoid people (probably represented by the

Wadjak remains) lived in Java and passed through Java into Australia where we notice the lack of bow and arrow, of pottery, of horticulture and domestication of animals. Thus the proto-Australians probably departed from South-Eastern Asia before the above cultural traits were developed. After these Australoids of the Early Recent period came the Negroids in the Middle Recent epoch, and these people, according to Davidson, appear not to have possessed water-craft capable of extended journeys on the open sea (Davidson : *Journal of the Polynesian Society*, No. 44, 1935). Thus we find that the Negritos, Papuans and Melanesians (all descending from the black races) " confined their colonization to a chain of islands few of which are separated by straits more than 50 miles in width at present sea level."

After the Melanesians there appear on the Pacific horizon the Mongoloid Indonesian races who colonised Micronesia and Polynesia—far-off zones of the North Pacific " which could be reached only in ocean-going water-craft capable of extended sea journeys." Although lengthy coastwise journeys were known to be common in earlier times, when we scrutinize the evidence from early peoples like the Egyptians and the Indians we find that " ocean navigation was not prominent until sometime during the 1st millennium B.C., " which marked the transition from the pre-historic to the proto-historic chapter of Asiatic culture. Thanks to the hoary antiquity of the Peking Man and the Java Man which we have already described and also of the Rhodesian Man and of the Mount Carmel Man of Palestine, Western scholars are approaching Asia and Africa with a new spirit of awe and expectation. They are inclined to place the Palæolithic and the Mesolithic cultures only in the real *pre-historic* group, relegating the Neolithic and the Chalcolithic cultures to the *proto-historic* epoch. But while the culture of the pre-historic man in this sense is definitely correlated with geochronology, thanks to the painstaking and scientific analysis of geologists, palæontologists and pre-historians, the chronology and diffusion of neolithic and chalcolithic cultures appear indefinite, complicated and apparently in disjointed series of evolution. This was very candidly admitted by an expert archæologist like Dorothy Garrod of Cambridge who was the Director of the Joint Expedition of the American School of Pre-historic Research and the British School of Archæology in Jerusalem. In a brilliant paper (*The Near East as a Gateway of Pre-historic Migration*, 1937), she gave the following summary of the pre-historic cultures of Western Asia which resembled on general lines Western Europe: In the Early Palæolithic age, the culture of Palestine and Syria resembled the Upper Acheulian culture of Western Europe. In the Middle Palæolithic epoch, African

influence pre-dominated, spreading somewhat eastward. But with the upper or Late Palæolithic stage Asiatic influence gained the upper hand and persisted into the Mesolithic period. Thus South Africa with its Rhodesian Man has come to throw a new light on the Aurignacian and Magdalenian cultures of Western Europe, and the grand pictorial and artistic traditions of the latter are being examined anew in the light of the Bushmen paintings of the South, and of the migration of Capsian culture through North Africa into South Europe, specially in the Iberian Peninsula which is the veritable Paradise for pre-historians. They have boldly broken the taboo of " untouchability " prevailing between Black Africa and White Europe.

But if this cultural relation between Africa and Europe, in the Stone age, is still only partially admitted, the contact and collaboration between Africa and Asia are beyond any shade of doubt. If the Rhodesian Man and the Java Man with their respective cultures are at present but vaguely equated, there cannot be any doubt as to the existence of the dark races (pure or mixed) and their distribution in Asia. The Negritos spread over South India, Malay Pesinsula and the Philippine islands; the Papuans were in the heart of New Guinea; and the Melanesians reached the far-off New Caledonia. When or whether these Negroids mixed with some other races and discovered the biggest island in the world is not definitely known. But the proto-Australoids (including the Veddas of Ceylon and possibly a few other South Indian tribes) and the Negroids follow strikingly parallel lines in their cultural expansion from the Indian Ocean right up to Melanesia and Australasia. Already Heine-Geldern (*Anthropos*, 1932) suggested a chronological limit of about 1500 B.C. when the Negroids (who followed the Negritos) came to be dominated over by the Mongoloid Indonesian peoples who, as we have observed, were the first to colonize Micronesia and Polynesia, thanks to their progress in ocean-going water-craft. We have noticed also that during the 1st millennium B.C., ocean-navigation came to be prominent for the first time, as observed by Davidson. While the early Vedic texts offer little conclusive evidence with regard to the familiarity of the Indians with the ocean and ocean-navigation, these come to be more and more conspicuous in later Vedic and Epic literatures. The Indonesian world and Java are clearly mentioned in the *Rāmāyana*. From the geographical data in Indian books like the *Artha-sāstra* and from *Periplus of the Erythraean Sea* and *Ptolemy's Geography*, we can definitely conclude that the centuries immediately before and after Christ were marked by a phenomenal development in ocean-navigation. Navigators from India, together with the Indian merchants (Vaisyas), Kshatriyas and Brahmans, were real

pioneers in the Western Pacific, founding big and prosperous kingdoms in Indo-China (Champa and Kamboja) and Insulindia (Sumatra, Java, Borneo and Celebes). It was in this Indonesian field of Greater Indian civilization that the ancestors of the Micronesians and Polynesians probably derived their earliest culture, and their inspiration and technique of ocean-navigation which enabled them to explore the Pacific from the Hawaii Islands in the North to New Zealand in the South and to Rapa Nui or Easter Island facing South America in the farthest East.* This expansion, however, was in the historic epoch, extending over about one thousand years, from the earliest Indian inscriptions in Indonesia (*circa* 4th century A.D.) to the landing of the Maoris in New Zealand (*circa* 14th century A.D.).

But Australasia in the Proto-historic and Pre-historic periods negotiated rather closely with far-off North China—the cradle of the Peking Man who is considered by several pre-historians as a distant cousin of the Java Man. The most sensational discovery in the domain of the recent pre-historic studies is the progressive correlation of the Pleistocene fauna of North China India and Java. This has been clearly demonstrated by the eminent French pre-historian Père P. Teilhard de Chardin (*The Pleistocene of China : Stratigraphy and Correlations*, 1937). He showed that the faunal analogies between the Equus-bearing lake-deposits of North China and the Equus beds of India (in Upper Siwaliks : Tatrot and Pinjor) and of Western Europe were quite clear and convincing. He also showed that the Middle Pleistocene of North China corresponded to similar beds of Java " which are almost actually linked with the Sinanthropus beds by a chain of Stegodon-bearing fissures from Java to the Yang-tze river basin through Indo-China." It is also significant that these synchronised beds of China, Java, India and Western Europe contained " the first sure traces of man " (vide: De Terra: *Cenozoic Cycles in Asia and their Bearing on Human Pre-history, Proc. Amer. Phil. Soc., Vol. 77, No. 3, 1937*). The cultural relations between Java in South-East Asia and the Siwalik and Choukoutien beds in Central and North Asia were probably carried on by the land route through Malay Peninsula and Indo-China where many pre-historic relics have already been discovered, and more will be forthcoming.

We are not sure, however, whether the cultural movement in this remote

* The advent of the Aryan-looking Caucasoid Polynesians synchronised very significantly with the eastward expansion of the Melanesians right up to Fiji and also with the northward movement of the Malays who are now admitted to be a mixture of the primitive South-Asiatic races with the Mongoloid and thus may be a branch of the Mongoloid Indonesians preceding them.

stone age of Asia was from the South to the North or *vice versa*. But there is no doubt whatsoever as to the dominant rôle of the Mongoloid races in the peopling of America. Exactly at what particular stage of the Stone Age culture this migration to the New World took place, there is no chance of knowning definitely. Only one thing is sure, that all attempts to prove the existence of a non-Asiatic New World Man have been frustrated, as shown by Dr. Ales Hrdlicka of the United States National Museum, in his paper *Early Man in America : What have the Bones to Say, 1937.* The Vero finds on the Atlantic coast in central Eastern Florida, the Folsom deposits in New Mexico and Colorado no doubt mark a new departure in the study of American origins. They have added new chapters on Folsom-Yma cultures which grew with the appearance of the first Mongoloid ancestors of the American Indians towards the end of the Pleistocene or Holocene epoch. H. J. Spinden, in his suggestive paper *First Peopling of America as a Chronological Problem, 1937,* observes that from the point of view of chronology, the Mongoloid migration into America may be as late as the Neolithic age, for the artifacts and implements of Early Man in America bear the mark of " relatively advanced Neolithic arts, with the flint knife and the stone axe as accepted symbols." He is also of the opinion that the culture was transferred to America *via* the Siberia-Alaskan bridge. According to Spinden, the ancestral cultures of the American Indian could be traced into Neolithic cemeteries near lake Baikal, where polished celts, chisels, knives, etc., are found along with harpoon points, fish-hooks, bone-saws and daggers, basket-marked pottery and copper objects—many of which could be compared with the cultural finds of America where Folsom and Yma blades show a skill in chipping unequalled during the Mesolithic period.

As regards the route of migration, Spinden points to the way of the Amur river and the coast and also to the water-road from lake Baikal, along the river Lena to the East Cape. East Cape in Asia is only 56 miles from the Cape Mountain of America and in between there are three rocky islands in the Behring Strait so that there is every possibility of crossing, the longest stretch of open water being only 25 miles. This was pointed out by P. S. Smith, Chief Alaskan Geologist, who observed that Alaska in those early days might have been an attractive land and that " the fossil remains of its then existing flora and fauna show that it could well have supplied the wants of many migrant people passing through or dwelling within it." Thus in tracing the earliest cultural relations of America with the outside world we are driven to the study of the early man and fauna of Eastern Asia. In

course of the last ten years of intensive exploration and study, following the discovery of the Peking Man, Eastern Asia has therefore assumed a position of unique importance; for here we not only meet some of the earliest ancestors of Man but also a clear sequence of cultures—Palæolithic, Mesolithic, Neolithic and Aeneolithic or Chalcolithic—such as is rarely to be found in any other part of Asia. Then the discovery of the *Yang-Shao* civilization, of the third millennium B.C. and its possible connections with the culture of Anau (Turkestan), of Tripolji (South Russia) and of the Baltic passage, are forcing us to revise many of our theories with regard to the cultural migrations from Asia to Europe, specially towards the end of the Neolithic age when Chalcolithic civilization like that of Mohen-jo-Daro and Harappa*, Susa and Kish opened new chapters in the proto-history of Asia.

* The discovery (1923-24) of the Indus Valley Civilization by the late Prof. Rakhaldas Banerjee opened a new chapter in the study of Indian culture with reference to the archæological finds in other parts of Asia. His work was further expanded and strengthened by his colleagues of the Archæological Survey led by Sir John Marshall whose three monumental volumes *Mohenjo-daro and the Indus Civilization*, London, 1931, have roused the attention of archæologists from different parts of the world. The chronology of this civilization was somewhat definitely fixed (2750-2500 B.C.) with reference to the datable levels of Mesopotamia, by Dr. H. Frankfort in his "The Indus civilization and the Near East (*Ann. Bibl. of Ind. Arch. for the year 1932, Leyden, 1934*). Its date of origin, however, has already been pushed as far back as 3500 B.C. by Dr. H. de Terra in his "Stone Age Man in Ice Age India and Burma"—*Asia*, March, 1939. The late Mr. N. G. Majumdar added new sites like Chanhu-daro, Jhukar, Amri, etc., while he published his *Explorations in Sind* in 1934. Mr. E. J. H. Mackay added new materials in his *Further Excavations at Mohenjo-daro*, Delhi, 1937-38. Mr. Madho Sarup Vats presented the results of *Excavations at Harappa* (Delhi, 1940) in two big volumes and the skeletal materials from Harappa still await scientific examination from the hand of Dr. B. S. Guha who has already published a report on the bones from Nal in Baluchistan. The pictographs and scripts of the Indus Valley Seals have been examined by several scholars among whom the Rev. H. Heras tried to interpret that script as writing "an early Dravidian language." An exhaustive study came from Prof. G. G. R. Hunter in his *The Script of Harappa and Mohenjo-daro and its Connections with other Scripts*, London, 1934. A most valuable study tending to link up the Indus Valley Culture sites with possibly similar sites in the Gangetic Valley and Eastern India, in the Narbadda Valley, in Rajputana, in Kathiawad and in other parts of India, has come from Rao Bahadur K. N. Dikshit, the present Director-General of Archæology (*Pre-historic Civilizations of the Indus Valley*, Madras, 1939).

Lastly, Prof. W. Norman Brown of the University of Pennsylvania, has thrown a new light on the Indus Valley discoveries in a highly suggestive paper. "The Beginnings of Civilizations in India" (*Journal of the American Oriental Society*, December, 1939). He pointed out that inspite of many points of resemblances between the Indus cultures and those of later historic cultures of India, the civilizations of the Vedic Aryans could not yet be satisfactorily connected with Indus cultures.

II

India and the Asiatic Background

THE Indus Valley people of the 3rd millennium B.C. are now known to be in close cultural relations with Mesopotamia and even with far-off Egypt, as recently shown by Earnest Mackay. In his latest excavation reports he draws our attention to the oblique-eyed Mongolian figurines which go to strengthen the finding of Dr. B. S. Guha who identified the solitary Mongoloid skull discovered so far in the Indus Valley. So in the Chalcolithic age, possibly as early as the 4th millennium B.C., India was negotiating with the Mongolian world where the Neolithic antiquity may reach as high as 10,000 B.C. Beyond that stretches the (as-yet-indefinite from the point of view of time, but culturally clear-cut), sequences of the Palæolithic age and culture. To the partial elucidation of the problems of those remote ages three prehistorians—H. de Terra, P. Teilhard and T. T. Paterson—collaborated on the Siwalik finds, announcing the summary of their results, from 1936, through scientific periodicals. The earliest Stone-age culture of India is represented by the hand-axe technique of Madras, and the Old Stone age peoples may have migrated from South India into Central India where, in the Narbada valley, have been found Middle Pleistocene tools and fauna which gradually extended through the Ganges and Jamuna valleys to North-Western India right up to the Himalayan hills. These valuable conclusions which gave a new significance to the early history of Man in India were the results of the scientific explorations under Dr. Hellmut de Terra in the Siwalik hills under the auspices of Yale University, the Carnegie Institution of Washington and the American Philosophical Society. The first valuable paper, *The Siwaliks of India and Early Man*, was communicated by Dr. de Terra to the *Symposium* (March, 1937) on *Early Man* published in commemoration of the 125th anniversary of the foundation of the Academy of Natural Sciences of Philadelphia. Most of the papers that I have quoted in this concluding chapter were published in this remarkable volume edited by Dr. George Grant MacCurdy, Director of the American School of Prehistoric Research.

Since the publication of "The Siwaliks of India and Early Man" in 1937, Dr. H. de Terra and his colleagues have published their systematic report entitled *Studies on the Ice Age in India and Associated Human Cultures* (Carnegie Institution, Washington, 1939). The most ancient

fossil mammals were discovered in 1836 by Falconer and Cautley in the Siwalik Hills. Almost a century after, Dr. de Terra discovered (1932-33) Stone Age artifacts in Kashmir and in the Punjab Salt Range together with a number of new fossil anthropoids from the Siwalik beds and Dr. de Terra sought the collaboration of T. T. Paterson of the Cambridge University and of P. Teilhard de Chardin, the renowned French Palæontologist of the Peking Man's laboratory. Their joint collaboration has produced a report which, for years to come, would be consulted as an authoritative document on the pre-historic archæology of India. The field work was resumed in 1935 when two promising Indian scholars Mr. D. Sen of the Calcutta University and Mr. N. K. Aiyengar joined the party exploring Kashmir and Jammu, the Salt Range, the Soan valley of the Patwar region near Rawalpindi and thence, through Sukkur region and Mohen-jo-Daro in Sindh to the Narbada valley and the Palæolithic site of Khandivli (near Bombay), and further South, examining the terrace-geology and archæology of the regions near Madras. They thus contributed for the first time to a clear understanding of Pleistocene geology and pre-history in Asia in their relations with India. Their conclusions with regard to the associated human cultures deserve special attention : Palæolithic Man invaded the foothills in the Punjab and in Poonch as early as the Middle Pleistocene epoch. But similar records are lacking from Kashmir proper where tools showing flaking tradition have been recovered with pot sherds in alluvial deposits on the banks of the Jhelum and in terrace sites of the Neolithic age. But the chronology of Neolithic age in India is still vague and depends on scientific exploration for further clarification. In the Megalithic site of Burzahom between Srinagar and Gandarbal, have been discovered flakes and cores, reminiscent of Palæolithic technique but most of the flakes were associated with pottery-bearing layers of either Neolithic or Aeneolithic culture. In the industries of Rohri and Sukkur area were found extensive use of cores and blades of different techniques, suggesting that the industries were late, but certainly earlier than the earliest period of the Chalcolithic civilization of the Indus valley (c. 3,000 B.C.). For we notice the absence of pottery and of metal in the industries of Rohri and Sukkur area, marking the upper limit of the Chalcolithic Age of the Indus.

The pre-historic hunter of the Old Stone Age apparently found the Pir Panjal Range too dangerous to cross for he " came from Peninsular India where no mountain barriers of equal height and wildness arose on his migration routes." Let us hope that the pre-historians in near future will trace clearly these routes of migration, linking up satisfactorily the

Stone Age cultures of Madras and the Narbada valley with those of the Indus valley from Sindh to the Punjab. The oldest agricultural periods in the history of Mesopotamia range from 4000 to 6000 B.C. With the intensive study of allied problems in India we may hope to mark gradually the transition from the pre-agricultural to the agricultural periods in the culture history of India, supplying hereby the background to our Chalcolithic culture of the 4th millennium B.C.

This fascinating subject is being studied zealously by Dr. de Terra as we find from his two recent papers* through which he tries to fix an approximate date of the early Indian Palæolithic culture. Assigning to Java Man and to Peking Man 500,000 to 400,000 B.C., he places the Indian early Palæolithic culture in the second interglacial (300,000-200,000 B.C.) and the Solo Man in *circa* 100,000 B.C.

New light on the pre-historic chapter of Peninsular India has been thrown by Mr. V. D. Krishnaswami through a valuable paper† published in the *Journal of the Madras Geographical Association*, March, 1938. As early as 1864, Robert Bruce Foote made surface finds of Stone Age tools among river gravels near Madras and those were catalogued under the "Foote Collection." But no serious attempt was made to work out their stratigraphical or cultural sequences till Prof. M. C. Burkitt of Cambridge University began to interpret§ the South Indian Stone tools.

But while many such traces of Stone Age culture in the North and in the South of India have been discovered yet unfortunately, as lamented by our esteemed friend Dr. B. S. Guha "no trace of the skeletal remains of Early Man associated with these finds, has so far been discovered in any part of India enabling us to judge his physical type and of his possible affinities with the Stone Age races of Europe and other parts of Asia." The skeletal remains from the Indus valley (3rd-2nd millenia B.C.), therefore provide real landmarks in the racial history of India. Dr. Guha identified two long-headed types and one broad-headed type with high cranial vault and prominent nose. All these three groups have been found in Al-Ubaid and Kish showing "that the racial strains of pre-Sargonic

*1. The Quaternary Terrace System of Southern Asia and the Age of Man (*American Geographical Review*, January, 1939). 2. Geologic Dating of Human Evolution in Asia (*The Scientific Monthly*, August, 1940).

I am thankful to my friend, Mr. D. Sen of the Department of Anthropology, Calcutta University, for drawing my attention to these recent studies of Dr. de Terra whose valuable researches were reviewed by Mr. Sen in his paper on "The Trail of a Past Climate" published in the *Calcutta Geographical Review*, (1940-41).

† Environmental and Cultural Changes of Pre-historic Man near Madras.

§ Burkitt—*Antiquity*, September, 1930; *Geographical Magazine*, May, 1932.

Mesopotamia and the Indus valley during the Chalcolithic times were closely allied." One of the pre-historic sites of South India, *viz.*, that of Aditanallur in the Tinnevelley district, had yielded several human skeletons which may be of later date, because the pre-historic sites excavated so far, in Central and Southern India are all associated with Iron; and even if we assign an early Iron Age for Peninsular India it could not be earlier than 2nd millennium B.C. Meadows Taylor published the drawing of a skull from the Megalithic ruins of Jewurgi which showed pronounced Negroid characteristics. The late Prof. Elliot Smith also examined some skulls from the Madras Museum and noticed " a definitely Australoid and an Armenoid strain among them."

In his valuable paper " An Outline of the Racial Ethnology of India," (Calcutta, November, 1937), Dr. B. S. Guha has given the most up-to-date and scientific analysis of the ethnic composition of present-day India. The following types emerge from his survey : (1) The Negritos, (2) The Proto-Australoids, (3) The Basic Dolicho-cephalic, (4) The Large-brained Chalcolithic, (5) The Indus, (6) The Alpo-Dinaric, (7) The Proto-Nordic, (8) The Oriental, (9) The Tibetan, (10) The Dolichocephalic Mongoloid, (11) The Brachycephalic Short Mongoloid and (12) The Oceanic.

It is significant that in discussing the main strains in the racial composition of the people of India Dr. Guha has not neglected to notice some minor drifts also. One such minor drift of the Negrito race, definitely identified by him has opened our eyes to the presence, in South India and elsewhere, of the descendants of the Black races who in different periods of history might have migrated from their homeland of Africa and passed through South India, the Andamans and Malay Peninsula to the very heart of Melanesia. This migration was mostly by the land-route along coast lines and island bridges; for the sub-continental man of Peninsular India and of Africa might be expected to develop a " land-locked mentality " which, according to Dr. Guha, was partially counterbalanced by our contact with the races and cultures of Insulindia or Indonesia which was much more favourable for the development of primitive navigation and ocean-craft. Dr. Guha is convinced that the Oceanic type which came to India brought " the outrigger canoe and the cocoanut with it. Its influence appears to have been confined chiefly to the southernmost strip of the Tamil Nad and Malabar, though it is possible that a wave of this movement reached as far north as Orissa."

Another possible line of migration has been suggested by the veteran anthropologist Rai Bahadur Sarat Chandra Roy, who characterizes the

Dravidians as " Indo-Mediterraneans." Thus some branch of the Mediterranean race also probably reached South India which towards the end of the second millennium B.C. was negotiating with their neighbours towards the west like the East Africans, the Hebrews and allied races. Thus the Indian Ocean as well as the Indian sub-continent seemed to have been the choice field of ethnic and cultural cross-currents. The most primitive autochthonous races, (Proto-Australoids or Pre-Dravidians, just as we please to call them) are now detected to have sent their offshoots towards Australasia.* Their path was crossed by the no less adventurous Negritos and Indonesians¶ moving from the West to the East. From the West again have come the Indo-Mediterraneans by the sea-route and other hordes by the land-route whom we now classify as Armenoid, Dinaric, Alpine, Proto-Nordic (Aryan), Caucasoid, etc.

From North-Eastern Asia have come the Tibetan, the Dolichocephalic Mongoloid of Northern and Eastern Assam and the Brachycephalic Mongoloid of Burma and adjoining lands. These race movements have continued through millenniums, from the dim pre-historic past, through the proto-historic to the historic periods. Then the advent of the Indo-Aryans and the sustained hegemony of the Aryan civilization, from the 2nd millennium B.C. to the end of the 1st millennium A.D., naturally made India the radiating centre of culture for nearly three thousand years. The expansion of Indian culture over the comparatively well-known countries of Asia has already been studied systematically, developing a new branch of Oriental history—the history of Greater India. But its vast context of the Pacific Civilization has been ignored so far and yet it appears now to have a tremendous significance, as we have tried to show through our discussions on the problems of the " Indo-Pacific domain " which is the true historical setting and geographical background of Greater India.§

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* A. H. Keane: Australasia: Encyclopædia of Religion and Ethics, Vol. II, pp. 236-245.
¶ Kruijit: Indonesians: Encyclopædia of Religion and Ethics, Vol. VII.
§ Nag: Greater India: Greater India Society Bulletin No. 1 (1926).

III

Pacific Civilization and India

THE expansion of Indian culture into the Pacific World is a grand chapter of human history. Towards the end of the first millennium B.C., we find that the place-names and family names of Indian origin were naturalised in Ceylon and Burma, Malaya and Java. Thence the whole of the Western Pacific came to be fertilised by the ideals and institutions of Brahmanism and Buddhism. Clear references to Vedic ceremonies in the far off island of Borneo, occur in the Yūpa inscription of King Mūlavarman of 4th century A.D. Thanks to the revealing researches of the late Prof. Sylvain Levi, we now know that later Vedic texts and mantras reached the island of Bāli and are still being treasured by the local Brahmin priests or *pedandas*. This early Vedic and Brahmanical currents were strengthened by the Buddhistic cross-currents of the Hīnayāna and the Mahāyana, as we find from the copious materials of Hindu-Buddhistic epigraphy and iconography discovered in Champā and Cambodge, Siam and Laos, Java and Sumatra, Celebes and the Philippines. Parallel to this southern sea-route of expansion was the northern land-route *via* Gandhāra and eastern Iran, Khotan and Kucha, Turfan and Tun-Huang leading to the very heart of China. Sino-Indian collaboration in the field of art, literature and philosophy formed the noblest chapter in the history of North-Eastern Asia whence Indian culture penetrated through Korea into Japan and to other islands of the North Pacific. What parts of this cultural complex could reach the Eastern Pacific basin and the New World are problems for future anthropologists and antiquarians. It is now generally admitted that some of the significant culture-traits of the Polynesian world were derived from Hindu-Buddhistic India during the first millennium A.D. With the extension of the Polynesian culture to New Zealand and Easter Island by the 14th century A.D., we reach the furthest point in the expansion of Indo-Polynesian culture. In that furthest corner of the South Pacific we find that these later cultural waves of the historical period were overlapping the proto-Australoid ethnic waves of the pre-historic period. This colossal cultural drama is reappearing to us like an ancient mutilated play with many acts and interludes still missing which future research alone would probably restore and reconstruct. But whatever portions have already been recovered inspire us with awe and admiration.

There might have been occasional lapses into racial conflicts in course of racial migrations but there was no sordid chapter of economic exploitation or political domination in the development of Greater India which, coming as a legacy from Emperor Asoka of 3rd century B.C., continued for over 1,000 years to foster the fundamental principles *maitri* (fellowship) and *Kalyāna* (universal well-being) which form the bed-rocks of Hindu-Buddhistic idealism. What India brought as her real and abiding contributions to the nations of the Pacific were not the conquering armies or the ruling dynasties long forgotten, but a veritable fertilising influence in the domain of the spiritual, intellectual and artistic creation. That is probably why and how veteran scholars like Prof. Kern and Dr. Skeat found, after years of research, that the oldest loan-words in the languages of the Malayo-Polynesian world were "words for religious, moral and intellectual ideas coming from India." In his highly interesting monograph on the "Indonesians," Mr. Kruijit noticed how the name for *God* in most of the languages of this Malayo-Polynesian world was derived from the Indian word *Devatā*. In Siau, the highest god is called *Duata* which is also found among the Macassars and Buginese as *Dewata*, among the Dayaks of Borneo as *Jebata* and *Jata*, among the Mongondouians as *Duata*, and among the people of the Philippine islands as *Divata, Davata, Diuata*." Mr. A. H. Keane also observes : (*Ency. Rel.* and *Ethics*, Vol. 7 and Vol. 2).

"At times the Polynesian singers appear to soar into the ethereal spaces and to realise the concept of a Supreme Being . . . . Tangaroa is spoken of as Toivi, the Eternal or else like the Hindu *Brahma* or the Dodonian Zeus that 'was is and shall be,' . . . is described in the loftiest language as dwelling 'in the limitless void of space, when the world was not yet, nor the Heavens, nor the Sea, nor Man.' . . . Such sublime conceptions, such subtle theosophies, such personifications of Chaos, Immensity, Gloomy Night, and other pure abstractions, in these children of nature, excite wonder and remain inexplicable in their present fragmentary state. Everywhere we find Heaven, Earth, the Universe, the After-World, recurring under diverse names and forms, personified by language embodied in theocratic and anthropomorphic philosophies—*echoes, as it were, of the Vedic hymns* reverberating from isle to isle over the broad Pacific waters. The question arises : *Have there been Vedic contacts ?*"

Thus, even in the days when the history of the cultural expansion of India was either hotly contested or but vaguely understood, some of the outstanding scholars of the West had repeatedly tried to link up the various

cultural waves of the Pacific world with those of India. During the last quarter of a century we have noticed how the positive contributions of India have been appraised and acknowledged beyond all doubt, thanks to the latest researches in the domain of anthropology, philology and archæology; the scholars of Europe and America have made substantial contribution to those sciences and we are thankful to them. May we not hope that the Academies and Universities of India and of the other Asiatic countries would now begin to encourage the rising generation of their students to pursue this new and fascinating line of research, linking the achievements of the Man in India with those of the Man in Asia and of the Man in the Pacific world ? Drowning the temporary typhoons of wars and violent conquests, the voice of the universal Man is ever ringing in our ears and the corridors of History are reverberating the music of human sympathy.* In the firm conviction that civilized Humanity will ultimately triumph over all the savage instincts of destruction, we close the book by offering to our readers some fragments, saved by happy chance, of the Polynesian Vedas reflecting the soul of the Pacific world.

* In concluding this volume I am glad to quote below the following passages from the *Buddhist Art in Siam* (1938), by that profound interpreter of Oriental Art, Dr. Reginald le May, Ph.D. (Cantab.) :—

" In conclusion, may I express the hope that one day, in the far distant future, our descendants will recognise that our present histories are all wrong. The true greatness of a people does not lie in the recounting of victories won on the battlefield and in the so-called " glory " of heroic deeds of arms. Such vauntings of human physical force only serve to feed our national pride and lust for conquest. The deeds themselves have their little day and vanish, leaving ashes and ruins in their train. No, the real greatness of a people lies in its contribution to that expression of the human spirit which is called by the name of "art," and there can be no doubt that, in the last, by that contribution will the people be judged. The question will be asked—not, whom have you conquered and how many have you killed in battle, but, what have you done to enrich and develop the spirit of mankind ? If only the will to create were greater than the will to destroy, no height of glory would be unattainable and man would cease to be a savage."

APPENDIX C

[Fragments of the Polynesian Vedas : (from *Polynesian Religion* by Dr. E. S. Craighill Handy, Bishop Museum, Bulletin 34, 1927; especially pp. 312-320 for Vedic and Indic resemblances]

I

I dwelt within the breathing-space of immensity.
The universe was in darkness with water everywhere.
There was no glimmer of dawn, no clearness, no light.
And he began by saying these words,—
That He might cease remaining inactive :
" Darkness, become a light-possessing darkness."
And at once light appeared.
(He) then repeated those self-same words in this manner,
That He might cease remaining inactive :
" Darkness become a light possessing darkness."

II

From eternity [Po, Darkness] came the universe [Ao, Light],
From the universe [Ao] the bright clear light,
From the bright clear light the enduring light,
From the enduring light the void unattainable,
From the void unattainable the void intangible,
From the void intangible the void unstable,
From the void unstable the void (endowed with) paternity,
From which came moisture, which combining with limitless thought,
Produced the visible Heavens [Rangi, the Sky Father]....

III

Seeking, earnestly seeking in the gloom
Searching—yes, on the coast-line—
On the bounds of light of day.
Looking into night.
Night had conceived
The seed of night
The heart, the foundation of night,
Had stood forth self-existing
Even in the gloom.
It grows in gloom—
The sap and succulent parts,

The life pulsating,
And the cup of life.
The shadows screen
The faintest gleam of light.
The procreating power,
The ecstasy of life first known,
And joy of issuing forth
From silence into sound.
Thus the progeny
Of the Great-extending
Filled the heaven's expanse;
The chorus of life
Rose and swelled
Into ecstasy,
Then rested in
Bliss of calm and quiet.

IV

Enter deeply, enter to the very origins,
Into the very foundations of all knowledge,
    Thou of the hidden face!
Gather as in a great and lengthy net, in the inner recesses of the ears,
As also in the desire, the perseverance, of these thy offspring, thy sons.
Descend on them thy memory, thy knowledge,
Rest within the heart, within the roots of origin;
    Thou the learned! Thou the determined!
    Thou the self-created.

V

O aumakuas from sunrise to sunset,
From North to South, from above and below,
O spirits of the precipice and spirits of the sea,
All who dwell in flowing waters,
Here is a sacrifice—our gifts are to you.
Bring life to us, to all the family,
To the young also.
This is our life,
From the gods.

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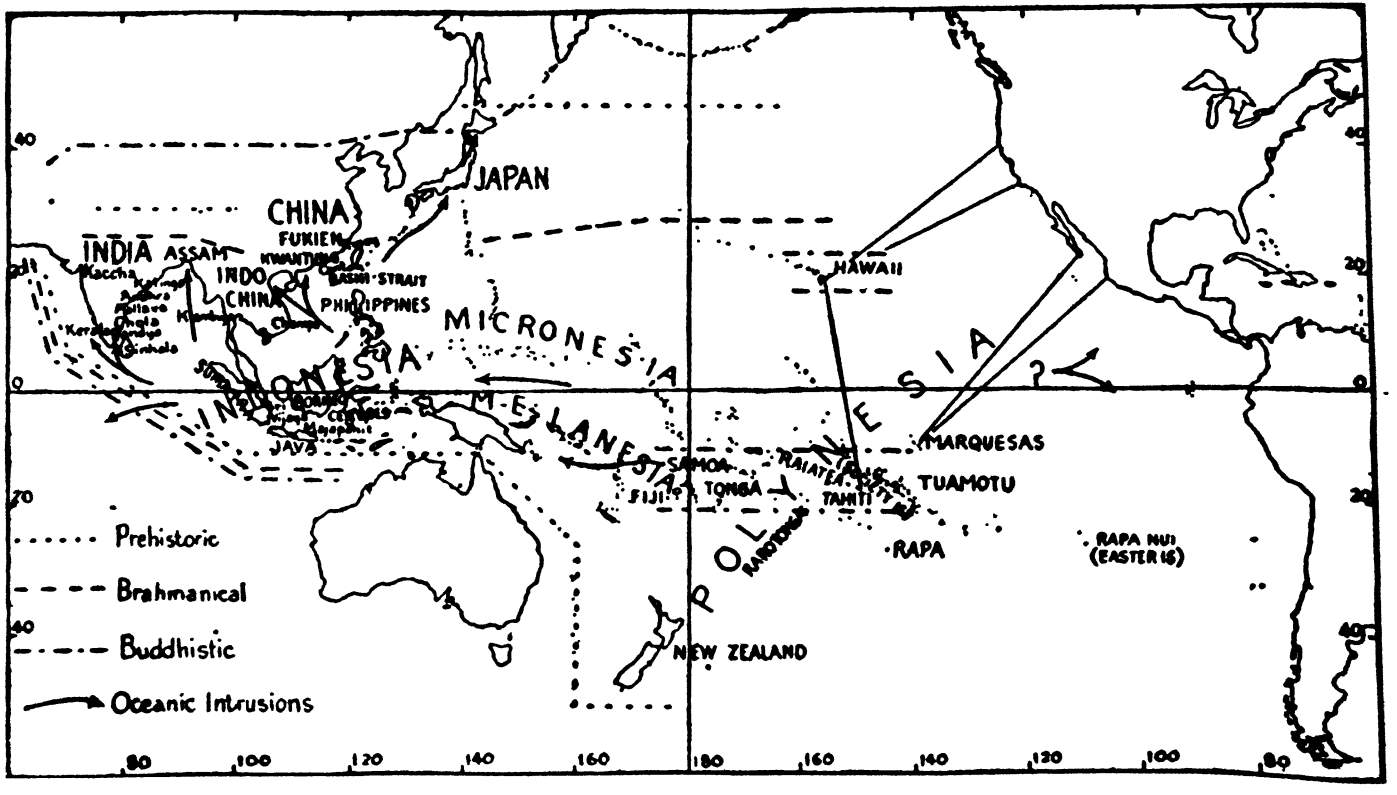

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