

AN ACCOUNT OF A TRIP MADE TO ANGKOR WAT IN 1872.

By the Rev. S. G. McFarland, D. D.

FOREWORD.

Dr. George B. McFarland, a son of the Rev. S. G. McFarland, D. D., who visited Angkor Wat in 1872, suggested to me that members of the Siam Society might be interested in the description of that famous temple as it appeared sixty-five years ago. He gave me a reprint of the account written by his father. I found this record to be most interesting, and agreed with Dr. George B. McFarland that it should be published in the Journal of the Siam Society.

To merely publish the document without any commentary explaining the relationship between the donor and the author of the paper, and giving some details of the archaeological work carried out by the French authorities, would have been an easy matter; but I felt that readers of the Journal would be more interested if the account were elaborated and brought up-to-date. Having this object in view I approached Dr. George B. McFarland and asked him if he would write a note touching on the more intimate side of the subject, he being a son of the author and alive when the trip was undertaken. I also asked Major E. Seidenfaden, the Leader of the Archaeological Study Section of the Siam Society, to write a short treatise on the subject of Angkor Wat. Few men are more versed in this matter than Major Seidenfaden. The two gentlemen acquiesced in my request and have kindly prepared notes which I think are valuable, and will be appreciated by members of the Society.

28th June, 1937

PRESIDENT.

VISIT TO ANGKOR WAT IN 1872.

Herewith a reprint of the description of Angkor Wat by the Rev. S. G. McFarland, D. D., issued in 1873 :—

The town of Siam-rap is on a small stream that falls into the head of Thalay Sap, or Great Lake of Cambodia. About six miles north of the town, and in the midst of a dense forest, are found the ruins of an ancient civilization, the counterpart of which is now nowhere to be found.

The ruins of a city, of which little else beside the walls and portals are now to be seen, and a temple, still in a good state of preservation, are the principal objects of interest. This temple, called by the Siamese Nakhor Watt, and by the Cambodians Angkor Watt is in $13\frac{1}{2}^{\circ}$ north latitude, and about 104° longitude east from Greenwich.

These ruins were visited about ten years ago, by the late Henri Mouhot, a French naturalist and traveller, who, in speaking of them, says: "This temple is a rival for Solomon's; grander than anything left to us by Greece or Rome."

Neither history nor tradition can throw any light on the origin or age of these wonderful specimens of architecture. The present generation of Cambodians and Siamese are as ignorant on these questions as their antipodes, and if questioned as to the founders of this magnificent temple, they will say: "The giants built it"; "It made itself,"; and "If man built it, it must have been built by a race of more power and skill than any to be found now." The latter it is not difficult to credit!

The present condition of the country around these ruins is in wonderful contrast with the magnificence that here lies buried. The country, though rich, is uncultivated, being mostly covered with forests. The people are poor and very ignorant, having none of the arts that once flourished in this valley.

There are three or four things about this grand structure which give it a valid claim to be considered a wonder, viz: the vast proportions, the unique and symmetrical design, the exquisite skill displayed in the workmanship, and the fact that it is built entirely of stone.

The visitor is at once bewildered, as in a labyrinth of corridors and massive towers, and is only enabled, after patient study and observation, to see the beautiful symmetry of design in the structure.

The approach to the portals of the outer wall is over a causeway seven hundred and fifty feet long and thirty feet wide, paved with large slabs of stone neatly and closely fitted, and supported by walls of great thickness. As our elephants emerged from the thick forest of trees and came upon this paved way, at the entrance of which are two crouching lions, sculptured from a single block of stone, we obtained our first view of this magnificent temple.

This causeway, which leads to the gate, crosses a ditch seven hundred and fifteen feet wide, which surrounds the entire outer wall. After crossing this moat we come to the high gateway of the wall. Passing through this portal we come into the space included within this outer wall, which contains two hundred and eight acres. In the centre of this area is the temple. The buildings of the temple cover an area of nearly ten acres. The space between the wall and the temple buildings is now overgrown with thorns and bushes, and in some places large trees. This was doubtless once a beautiful lawn and garden.

Commencing from the building or portal, which forms the principal entrance, is a second causeway thirty feet wide and a thousand and ten feet long, paved with stones, and raised four feet from the level of the ground. On each side of this way is a balustrade, formed of long dressed stones; and on each side of this causeway, at intervals, are six platforms projecting, with several steps leading to the ground, and on the end of the balustrade at the end of the steps, are sculptured serpents with seven heads. This second causeway, or paved walk, leads to the main entrance of the temple.

The temple is composed of three distinct parts, or galleries; an outer, middle, and centre, raised in the form of terraces, one above another; the outer one being a rectangle five hundred and eighty-eight feet by seven hundred and fifteen feet; the centre one an exact square, measuring one hundred and seventy feet on each side. The building stands exactly with the points of the compass, the front facing the west.

On the west and east are five doors and staircases—three in the middle, and one at the ends of the galleries at each corner, and three doors on each of the remaining two sides. These doors have each a portico which projects a few feet from the front,

The first terrace is eight feet from the ground, and is ascended by a flight of stone steps in front of the middle door; the galleries are seen stretching away to the right and left, a distance on each side of two hundred and ninety-two feet. The roof covering these galleries or colonnades, is supported in front by a double row of columns, surmounted by capitals, formed in each case of a single block of stone. The first row of columns is ten, and the second is seven feet high. These columns are square, having the base and cornice beautifully carved, and formed in each case of a single block of stone. The inner support for the roof is a solid wall, covered its entire length, a space of six feet wide, with bas relief. At the four corners of these galleries are towers.

Passing from the front through the first gallery, we come into a square space where two galleries, each of two double rows of pillars, cross each other at right angles. This part is in the form of a cross. In the four squares formed by these galleries, crossing at right angles, are four depressions, each forty-four feet square and six feet deep, with steps leading down into them from the foot of the galleries. These depressions are paved with stone, and are supposed to have been baths.

Passing through the colonnade answering to the arm of the cross, and ascending fifteen feet, we come to the second, or middle terrace. This, like the first, has a row of roofed galleries, supported on the outside by a double row of pillars, and on the inside by a wall with blank windows, having turned rounds of stone. Under the arched roof of this row of galleries are rows of idols. At the four angles are towers similar to those of the outer row.

Passing through the door of this middle terrace we stand in front of the high stairs which lead to the main Prasat, or centre terrace. Ascending these steps, a height of forty feet from the pavement of the middle terrace, we come upon the centre one, which consists of a row of roofed galleries in the form of a square, each side measuring one hundred and seventy feet, and corresponding exactly with the points of the compass. This square has also a tower at each of the angles.

The Prasat, or centre tower, is in the centre of this terrace, and surrounded by the roofed colonnades, to which it is connected at each of the four faces—north, south, east, and west—by short roofed galleries, supported each by two double rows of pillars.

Such is a miniature view of this great temple, as seen by one passing from the front through all the passages that lead up to the centre tower. Let us now take a more minute view of some of the various parts.

THE PRASAT.

This is a tower in the centre of the temple, square at the base, with openings, or canopies looking to the west, south, east and north; in each of which is a standing idol, built in the wall, and each of these four idols facing to the points of the compass. In front of each of these standing images are three sitting and one reclining. There are then altogether five images in each of these arched canopies, under the tower, and twenty in all the four.

Over these arched canopies rises the immense conical tower, to the height of one hundred and ten feet from the pavement. The pavement of this centre terrace, as we have already seen, is sixty-three feet from the level of the ground, thus making the height of the spire one hundred and seventy-three feet. The top of the tower is finished with pointed stones ranged in courses around it.

Leading out from the front of each canopy is an arched gallery, with roof supported by two double rows of pillars, each gallery intersecting the middle of the side of the four square set of galleries that surround the centre tower. These galleries, as has been shown, are one hundred and seventy feet on a side, and consist of an arched roof of stone, supported on the inside by two rows of pillars, and on the other by a wall. At the angles are four arched towers, similar to the centre spire, but smaller. At the angles where these two sets of galleries intersect are four depressions, five feet deep, with two pairs of steps descending into each. The cornices and moulding around these depressions are very elaborate and beautiful.

This seems to have been the sanctum sanctorum, the holy of holies. Here the devout worshippers sat, in these roofed galleries, around the Prasat, each one, whatever his position, able to look upon the image, the object of his worship.

There are three flights of stone steps on each side of this square, descending to the floor of the middle terrace, one at each angle, and one in the middle of the side. The portico or door opening upon these steps from the gallery, projects a few feet from the facade, and is ornamented with pillars, capitals and arched roof. The front of this roof is beautifully and elaborately carved in the form of a ser-

pent with many heads. This serpent is seen winding itself in curves with head erect.

THE BASE.

The base of this terrace, which is forty feet in perpendicular height, is laid with massive stones, which are most elaborately carved in arabesque, and rounded into bold and massive cornice and moulding. The eye wearies in looking over the multifarious carvings and ornamentation of this basement, and the mind is impressed with the power and skill of the workmen who brought from a distance and placed in position these massive stones, so neatly and closely fitted and joined, as even now, after the lapse of ages, to appear almost without seam! The stone in this part of the temple is crumbling. Much of the beautiful carving in arabesque has fallen. Around the foot of this base are heaps of broken and crumbling stones, many of them with parts of figures and flowers, which have fallen from the surface above.

THE ROOF.

The roof is arched, and without key-stone. This fact would seem to indicate great age. Immense blocks of stone extend from one pillar to another, and on these is built the roof in horizontal layers; each layer of the two sides drawn in towards each other a little, until finally the two sides meet at the coping.

These horizontal layers of stone are bevelled both on the outside and inside. The bevel on the outside forms the slope of the roof, and that on the inside the concave of the arch and the ceiling of the galleries. Under the towers in each of the galleries this arching is very imposing, the four corners rising with architrave, frieze and cornice, till they meet at the arch, look like four massive pillars with their cornices joined. The roof is elaborately carved, and at the eaves and gables may be seen the figures of a serpent with seven heads.

THE PILLARS.

In this temple alone there are as many as one thousand five hundred and thirty-two columns. These columns support the roof, and are formed in each case of a single block of stone. The base and capitals are neatly carved. Some of these pillars have inscriptions.

THE CROSS.

After passing through the outer gallery by the front entrance, you come upon an open colonnade about ninety feet long, with arched roof supported by a double row of columns. Another open colonnade with arched roof, exactly similar to this, crosses it midway and at right angles, making the form of a cross. The design and workmanship on the inner part of this open court are truly magnificent.

The elaborations of the work on the roof, the boldness of the massive cornice and mouldings at the base, the elegance and symmetry of the columns, are truly beyond imagination. One may sit in this part of this great temple, and with wonder and amazement gaze upon this wonderful work of art with undiminished interest for many days.

SCULPTURES AND BAS-RELIEFS.

All the mouldings, sculptures, and bas-reliefs in this temple, appear to have been executed after the building was erected. Throughout the galleries in various places, are sculptured in the wall figures of women. The figures and features of these resemble more the Cochin Chinese than any other race now found in the East. The bas relief on the wall of the outer circuit of corridors is six feet four inches wide, and extends around the entire building a distance of two thousand six hundred feet, or about half a mile. These sculptures represent the story of the Hindoo Ramayana. One part represents a battle, where the heads of columns are meeting, each preceded by its leader in grotesque clothing and armor. Following these are fabulous animals, supporting several warriors; then elephants, lions and fabulous beasts, harnessed to chariots filled with the fierce combatants in all imaginable positions, spearing, cutting, biting, choking, kicking each other; the elephants and other animals piercing and trampling their enemies.

This splendid structure is surrounded by a dense forest—many of the trees of unusually large growth—with no inhabitants of the country near. In the town of Siam-rap, which is six miles distant, all the houses are of a very inferior quality, generally of wood and bamboo, and covered with grass-thatch. A few miserable huts of Buddhist priests are now standing in front of this grand temple, in striking contrast with the skill and perseverance of past ages.

What busy scenes were once enacted here! What a magnificent display there must have been at the dedication of this beautiful work of art.

It is a most wonderful structure. The finished and perfect joining of the stones, the carving, the cornices, the columns, the capitals, the towers, the immense stones—everything is a source of wonder. As a whole, it is grand in its design, masterly in finish, and very imposing in appearance.

A NOTE BY DR. GEORGE B. MCFARLAND, DEALING WITH THE
INTIMATE ASPECT OF HIS FATHER'S TRIP TO
ANGKOR WAT IN 1872.

For centuries Angkor Wat lay hidden in the depths of the jungle far from the reach of world commerce. The first effort to bring it from obscurity was that of M. Henri Mouhot who visited Siam and Cambodia from 1858 to 1861, and whose account and drawings of Angkor Wat were the first to bring it to the notice of the world.

Shortly after his return from Angkor, M. Mouhot went to Petchaburi and spent four months in that region. This was May-August 1861. My father and mother had come to Siam the previous year and in 1861 they went to Petchaburi, which then became their home for eighteen years. I have no way of ascertaining whether my father ever met the great naturalist and explorer, but it seems not improbable that such was the case. From his own account we know Mouhot sought out the Roman Catholic missionaries wherever he went in Cambodia, though not himself a Roman Catholic. Common nationality would naturally draw them together, and need of help also caused him to seek them out. It is quite possible that need did not force him to seek out my father, but it is very probable that they did meet. Be that as it may, certainly when word came a few months later of the death of the intrepid explorer in the heart of the jungle of north-eastern Siam on November 10, 1861, no foreigner in Siam was unmoved. The little group was too small to have such an event pass unnoticed. Then three years later M. Charles Mouhot brought out the two volume account of his brother's travels and discoveries. I am sure my father must have read this with deep interest. He himself was a pioneer and toured extensively over the Petchaburi province. The experiences of the Frenchman were something akin to his own.

My own memory does not go back so far but it does go back to January 1872 when, at the invitation of Mr. Frank Vincent, Jr., my father left Petchaburi for Bangkok to act as interpreter on the trip which that world traveller proposed to make overland from Bangkok to Angkor Wat. Great excitement reigned in the McFarland home. Even a mere trip to Bangkok filled my childish mind with untold excitement. Two nights must be passed en route in the house boat and sometimes a third if we were unlucky and missed the tide or got

caught in a jam of boats. The adults found the trip a very wearisome one; not so for us children. There were monkeys swinging from the trees, only too ready to come to our bait of bananas. There were iguana sunning on the mud or swimming in the water. There was an endless panorama of human life on water and on shore. It was on one of these boat trips, as I attempted to look out of both sides of the boat simultaneously, that I acquired a nick-name which stuck through adolescence—Perpetual Motion. But this time, I could not go. Perhaps it made the excitement all the greater and our incessant flow of questions about the mysterious wat in the jungle and the forthcoming trip must have wearied my father almost beyond endurance—for I was only one of four. But at last he got off, and we children settled down to a wordy discussion of what father would see and of the fierce animals he would slay in the jungle wilds.

On January 25th, 1872, the little party started from Bangkok. Fortunately a very detailed account is to be found in "The Land of the White Elephant" by Frank Vincent, Jr., and on this I depend rather than on my memory, for a lad of six remembers certain trivial things out of all due proportion to things of real moment.

General F. W. Partridge, American Consul, had also accepted the invitation to join the party, which was composed of "three Americans, one interpreter, six Siamese, and one Chinese, in all eleven persons". A Chinaman named Deng was cook and had travelled with M. Henri Mouhot to Luang Prabang, and later this servant was with him when he died and brought his effects back to Bangkok.

Mr. Vincent writes, "A part of my duty was to select and purchase the food supplies—liquors and provisions in bottles and tins—ale, brandy, sherry, and claret, meats, vegetables, biscuits, soups, condiments, &c.; and potatoes, rice, onions, hams, coffee and tea in bulk. We intended to rely principally upon these, though we also proposed to eke out our preserved, condensed, and desiccated victuals with the produce of the country through which we would journey, viz., rice, fish, poultry, eggs, and various fruits. I used much time in endeavouring to obtain a Cambodian interpreter, one speaking English, or even Siamese, who was willing to go with us, but met with no success. However, Mr. McFarland's servant was a Cambodian by birth, and, though he had lived nearly all his life in Siam, still remembered sufficient of his native tongue to be of considerable

service to us. We took an assortment of medicines, especially a liberal supply of quinine, three grains of which we were recommended to take every morning in our coffee by Dr. Hutchinson. Each one had his mattress, blankets, and mosquito netting, though all carried as little personal baggage as consisted with comfort and health. The offensive and defensive (especially) weapons of the party comprehended two revolvers and two or three large bowie-knives. We also carried a few scientific instruments and writing and drawing materials, maps of the country, a selection of books and old magazines, and I packed in my waterproof bags besides a few presents for the King of Cambodia, Governor of Siamrap, and some other great men. Money was carried in several small packages—silver and copper coins—though our letters were adequate to secure for us every hospitality and attention. These letters were simply official orders from the Siamese Minister of Foreign Affairs to governors of the provinces through which it would be necessary for us to pass. "There are three boats. In the first—a four-oar—voyages the General and his servant; next follows a six-oar, with the Missionary and myself; and last goes a four-oar, containing our interpreter, my "boy," "Deng" the Chinese cook and the greater part of the provisions and baggage." Leaving the Consulate wharf the party headed up river, then turned into a narrow canal leading directly east. The old record does not state the name of this canal, so the exact route is left to conjecture. Two general routes were a possibility. Klong Prakanong leads from Bangkok to the Bangpakong river. However, it enters the Menam Chao Phya below the Consulate, which at that time was located where the Borneo Company, Ltd., have their wharves today. As the party headed up river, probably partly to take advantage of the tide, this route was certainly not taken. The alternative route was the logical one anyway. Klong Sen Sep was dug in 1840 to be used as a military waterway owing to continual trouble with Cambodia. It is also known as Klong Bang Kanat. Though it does not itself lead to the Menam Chao Phya, it does join with several canals leading to that river. It was doubtless into one of these canals that the party turned "directly east," passing into Klong Sen Sep, which branches shortly before reaching the Bangpakong river. The party probably took the northern route.

"The boats were anchored about midnight." On the morning of the second day from Bangkok they entered the Bangpakong river. They then ascended it about fifty miles to Prachin, the residence of the Governor.

The Governor was very gracious and invited the party to pass the night in a house he had prepared. They preferred their boats, however, and slept there. From this place the party travelled overland. The Governor secured three ponies for the Americans and four bullock carts for the servants and baggage.

The party was astir at daylight of the 29th, transferred their possessions from the boats to the bullock carts, dispatched the boats on their return trip to Bangkok and felt they were really started. "The road at first led over an even plain, for the most part covered with coarse grass; and in the distance were forests and a low range of blue mountains. Some paddy was cultivated by the roadside, but few dwellings, however, were seen. Those on horseback travelled about three miles an hour and the bullock carts hardly two." Having crossed the Bangpakong river they shortly afterward reached Chantakan—about 15 miles from Prachin. Villagers escorted them with torches to the residence of the Deputy Governor, who gave them the use of two newly built salas and provided dinner. As the carts were still not to be seen, the provision for their wants was doubly welcome.

Their next stop was Krabin. On the 1st of February—one week after they left Bangkok, the party crossed the boundary into old Cambodia. The party rarely accomplished more than twenty miles a day. Camp at night was under spreading trees or at some sala. Fires were built on every side to ward off wild animals and to provide a smoke screen against mosquitos.

Sesupan is the next landmark. There the Governor offered three elephants, three buffalos and one bullock cart, beside making numerous presents. Everywhere Government Officials were most courteous and kind.

Panoun-sok is the next place mentioned in the annals. The Governor was himself away assisting in the cremation of a nephew in Korat. However the Governor's wife saw to it that no courtesy was omitted and even invited the party to join hers as she was leaving the following day for Siamrap. Upon hearing that it was her intention to travel slowly the Americans decided they would better

set their own pace and so started on ahead. On February 11th the party reached Siamrap, having travelled a total distance of 245 miles. "Of this 30 miles was on the Bangpakong river in boats, and the remainder—215 miles—was performed upon horses and elephants, in bullock carts, and on foot; the greater part of the journey, however, was accomplished on horseback. The time consumed in making this trip was seventeen days".

Mr. Vincent writes, "The Governor of Siamrap having provided us with three elephants, on the 13th inst., we started for the ruins of Angkor, three and a half miles distant, to the north. We took but little baggage with us, being rather impatient now that we were nearing the main object of the expedition—the ultima Thule of our desires and hopes—and so we passed quickly and silently along a narrow but good road cut through the dense, riant forest, until, in about an hour's time, on suddenly emerging from the woods, we saw a little way off to the right, across a pond filled with lotus plants, a long row of columned galleries, and beyond—high above the beautiful cocoa and areca palms—three or four immense pagodas, built of a dark-grey stone. And my heart almost bounded into my mouth as the Cambodian driver, turning towards the howdah, said, with a bright flash of the eye and a proud turn of the lip, "Nagkon Wat;" for we were then at the very portals of the famous old "City of Monasteries," and not far distant was Angkorthom—Angkor the Great."

In 1924 my sister, Miss Mary McFarland, visited Angkor and while there saw an old Register of Visitors to Angkor. My father's name was the second on the list. When I realized the desire of a lifetime and visited the ruins in 1934, I tried to discover this Register and see for myself that signature. The only information I was able to get was that this book had been stolen. It must have contained many illustrious names gathered over a span of sixty years.

An interesting episode of my sister's visit occurred as the Curator, now retired, showed her some old pictures of Angkor. She recognized them immediately and when he told her that they were one of two identical sets but that he did not know where the duplicates were, she replied, "They are among my cherished possessions as they were made when my father visited Angkor in 1872."

The visit to the ruins ended, the Vincent party broke up, my father and General Partridge returning as they went and Mr. Vincent going on to visit Saigon. It is interesting to note how nearly the present railway follows the old route taken by the Vincent party.

A NOTE ON THE ARCHAEOLOGICAL ASPECT OF
REV. DR. S. G. MCFARLAND'S ACCOUNT OF HIS VISIT TO
ANGKOR WAT IN 1872.

By Major E. Seidenfaden.

The President of the Siam Society has asked me to write a note dealing with the description of the famous temple of Angkor Wat, written in 1873 by the late Reverend S. G. McFarland, D. D., and being myself one of the devotees of this, to my mind, most magnificent fane amongst the greatest monuments of the world, I do so with much pleasure.

The ruins of Angkor Wat were discovered, or rather rediscovered, by the French explorer and naturalist, Henri Mouhot, on the 22nd January 1860 after they had been forgotten by the civilized world for several hundreds of years.

Mouhot was the first European to give us a detailed description of this wonderful temple, and when comparing his account, as well as that of Dr. McFarland, with the scholarly descriptions and explanations as supplied by such experts in the archaeological science as the late Major Lunet de Lajonquière in his great work "*Inventaire descriptif des monuments du Cambodge*," or Monsieur H. Marchal in his excellent "*Guide archéologique aux temples d'Angkor*", it is really extraordinary to note how exact is the information given by both of the former narrators, though neither of them was trained in archaeology. The famous German traveller and encyclopedic savant, Dr. Adolf Bastian, visited Angkor Wat during the cold season 1863-64 and he has also given an account of his impression of the great temple in his book "*Reise durch Kambodja nach Cochinchina*". His description of the bas-reliefs in the outer galleries of the temple is more complete, though at times somewhat vague, than that of Mouhot and Dr. McFarland. A few years later the ruins were again visited this time by members of the famous Doudart de Lagrée-Garnier expedition, which gave an account of their visit on the pages of "*Le Tour de Monde*".

Other students repeated the description of the temple during the following years. To name the most important :— Bouillevaux in "*L'Annam et le Cambodge*" 1874; Delaporte: "*Voyage au Cambodge*" 1880; Moura: "*Le royaume du Cambodge*"; Tissandier: "*Cambodge et Java*" 1896; Pavie in his "*Mission Pavie*" 1898-1904;

Fournereau in "L'Art Khmer"; and the veteran archaeologist Major E. Aymonier in his "Cambodge" 1904; followed by the learned General de Beylié: "L'Architecture hindoue en Extrême Orient" 1907; Carpeaux: "Les ruines d'Angkor" 1908; and finally Commaillie with his "Guide aux ruines d'Angkor" 1910, for a long time an excellent guide until it was replaced by the more scholarly and up to date book by M. Marchal, mentioned above. Such great authorities as Messrs. Finot, Maspéro, Parmentier, Coedès, Groslier and Stern have of course also added greatly to our knowledge of the temple from the archaeological, historical, epigraphical and artistic point of view. To this must be added the sumptuous illustrated work "Le temple d'Angkor Vat" I-III published by Van Oest.

The date of the construction of Angkor Wat was unknown for a long time, it being surmised that it took place either during the reign of King Suriyavarman II., posthumously named Paramavishnuloka, or his successor Dharanindravarman II. Thanks, however, to the discovery in 1918 by the writer of these lines of an inscription on the door of the inner and southern gopura in the Phimai temple, dated 1108 A. D., set up by a certain Virendradhipativarman, one of Suriyavarman's generals, whose portrait is found in a royal procession depicted on one of the bas-reliefs in the galleries of Angkor Wat, it can now be said with certainty that the construction of the temple was approaching completion, if not completed, by the middle of the 12th century.* The construction must of necessity have lasted for many decades. The age of the temple is thus about 800 years. As stated above, Dr. McFarland's description of Angkor Wat, though rather brief, is very precise and as far as it goes only calls for some few remarks. On page 38 the Doctor says that the depressions, surrounding the cross-shaped gallery between the outer and middle gallery, on their western side, are supposed to be baths. This supposition has since been disproved as the depressions in question cannot and never could hold water. On page 41 the Doctor says that the figures and features of the women (devatas) carved on the pillars and walls of the galleries "resemble more the Cochin-Chinese than any other race now found in the East". By Cochin-Chinese we nowadays understand Annamites, or the mixture of Annamites and Khmer living within the confines of that part of

* Vide Major E. Seidenfaden "An excursion to Phimai" J.S.S. on page 52 vol. XVII, Part 1, 1923,

Indochina. The Doctor may not, however, have been thinking of the Annamites, as the devatas do certainly not resemble that people.

In this connection it may be of interest to quote Mouhot who, in his posthumous work "Travels in the Central parts of Indo-China, Siam, Cambodia and Laos," Vol. II, p. 24, says: "When looking at the figures in the bas-reliefs at Ongeor, I could not avoid remarking the strong resemblance of the faces to those of the savages" (i. e. the Khā or Moi). These remarks, coupled with my own observations, seem to be confirmed by M. Marchal, Chief of the Archaeological Service of Ecole Française d'Extrême Orient, in his recently published study "Des influences étrangères dans l'art et la civilisation Khmèrs" (Saigon 1936). As the opinions voiced by this experienced archaeologist have a direct bearing on the forms of the art exhibited in the galleries of Angkor Wat and in other Khmer temples, besides being of general interest to the students of the civilisation of the Far East, I shall venture to quote M. Marchal at some length. M. Marchal says that the Khmer civilisation is constituted of two elements, a Môn, which brought to it the Hindu culture with its literature and religions, and a Malay or Indonesian, which transmitted to it the remains of a very ancient civilisation, the so-called Oceanian, whose cradle is unknown, but the traces of which are found from Central America via the Pacific, Insulinde and India to Madagascar. Too long students of art have classified the art of the Khmer as a simple branch of the Indian art. However true that may be of the beginnings, the Khmer art little by little transformed all the Indian elements till in the XIIth century A. D. it represented an art totally different from the origins.

Before continuing to quote M. Marchal I should like to point out that one of the most important elements, physically speaking, in the composition of the Khmer people, is the dark negroid strain due to mixture of the Môn-Indonesian with the former Melanesian population. This Melanesian imprint is clearly shown in the features of the statues of the so-called classic (Angkor) school of art with their bulging foreheads, broad noses and thick lips as well as their short chins, features which are very common to meet among the present-day rural population of Cambodia as well as among the primitive Chong, Samrae and Kui. The same observations hold good for the also so-called Dvaravati art, where the oldest images of the Buddha are finely featured almost pure Gupta art, but little by little they

deteriorate and take on the features of the local population, i. e. they become almost negroid with curly hair, broad noses, bulging foreheads and thick lips (see for instance the stone images of the Buddha exhibited in the outside niches in the gallery of Wat Benchamabopit). Mr. le May and I have observed and studied this transformation for years, and our opinion is now confirmed by M. Pierre Dupont in his recent publication "Art Siamois" (which forms a part of "Musée Guimet—Catalogue"). The original Môn were probably fair skinned people, and so are many of them to-day, but the mixture with the Melanesian population created a dark somewhat negroid type beside the original fair one.

With regard to the Oceanian civilisation it seems that Bastian had also some vague ideas of the existence of such a one. In his above quoted book, vol. II, p. 107, he says that the Buddhist apostles, who extended their mission activities right over to Celebes, are met with in the myths and the art of the Polynesians and in Mexico, where they are depicted as umbrella-carrying, legendary personages, finally to disappear somewhere in South America.

M. Marchal further says that it seems that there were two ancient currents of civilisation which profoundly left their mark both in Asia and Oceania, extending even as far as Central America and Madagascar.

One current brought the civilisations of Egypt, Sumer and Akkad via India to the Far East where it met the Oceanian civilisation. The impact of this meeting caused the formation of new elements of culture in China, Indochina and Java. It is thus not only in India that we have to search for affinities with the Khmer art but also in China, Polynesia and in the Maya art of Central America.

M. Marchal thereafter draws the attention to several details, which are *not* of Indian origin, such as the shape of the temple (or palace) roofs in China, Annam, Cambodia and Siam, with their turned up corners and their wooden rafters carved in the likeness of snakes. Though no such wooden buildings have been left us from the golden era of Cambodia, M. Marchal does not doubt that such ones did exist during that time. As M. Parmentier says, "these roof constructions represent something autochthonous for the whole of the East, i. e. from Indochina to Oceania (including the Moi or Khâ region, Sumatra, Celebes, etc.) while "it predominat-

ed in Java in the curved roofs of the civilisations of Borobudur." Examples of this Javanese roof style may be seen in this country in the "salas" in front of Wat Benchamabopit, Bangkok, and those flanking the great Naga staircase on the northern face of the giant stupa Phra Patomchedi, Nakhon Patom. As regards particularly the tiered roofs and the snake motif as decoration on the Thai and Khmer temples, Carl Bock, author of "Temples and Elephants," as well as I myself, pointed out the striking resemblance to the ancient Nordic wooden "Stave churches," which date back to the 12th century A. D. (though this style is undoubtedly much older, having been used in the old Scandinavian feasting halls long before the 12th century) and of which a few ones are still in existence in Norway and Sweden. Though I do not dare to propound any new theory about the relations between the temple roofs of Indochina and those of ancient Scandinavia, still it does not seem unreasonable in view of Professor Oswald Sirén's finds of stone reliefs in China, of which almost exact counterparts have been found on the island of Gotland, Sweden, to believe in a common origin, perhaps somewhere in Central Asia.

According to M. Marchal another non-Indian element of the Khmer art is the head of the monster Makara or Rahū, in China called T'ao T'ien and in Java Kala. He points out the rôle which is played by the head or mask in the Maya art and in Oceania. This head of the Makara is of course a very favourite element of art in the Khmer lintels, and compositions including it have been classified by Lunet de Lajonquière under type III of lintel decorations.* M. Marchal traces the origin of this element to the head hunting habits of certain primitive people who use the heads of slain enemies for protective magical purposes. In this connection I would add that Dr. Leonhard Adam in "Man," January 1936, p. 9, has published a very interesting illustrated note on a T'ao T'ien mask used as decoration on an ancient bronze bell dating back to the times of the Chou dynasty in China (Cⁿ 1050-250 B.C.). Dr. Adam finds the same motif in certain wooden carvings executed by the Haida Indians on the coast of North-West America.

The cult of the snake, naga or dragon, M. Marchal says, had its origin in Mesopotamia, not in India, and from there it spread to India, Indochina, China and even to Mexico (the feathered snake) while, as

* Vide I. K., vol. 1, LXXXI-LXXXII.

already said above, the snake motif was very popular in ancient Scandinavia for decorating both its wooden buildings and its war ships. The latter were called dragon vessels from their bows which were carved in the likeness of serpents' heads (also met with in ancient war canoes in Siam, Cambodia and in Polynesia). M. Marchal also compares the Phimanakas in Angkor Thom with the Ziggurats of Mesopotamia and the Teocallis of the Mayas in Mexico and Yucatan. The union of the King of Cambodia with the serpent divinity has its counterpart in the civilisations of Sumer and Chaldaea. Even the Garuda is of non-Indian origin; it hails from the ancient arts of Egypt, Sumer (3000 B. C.) and Assyria.

The cyclopean walls, besides in Cambodia, are also found in Peru (and on certain Polynesian islands), while a number of modes of construction are common for Cambodia and Central America.

All these non-Indian elements should go to prove M. Marchal's contention that the Khmer art (and architecture) is of a hybrid composition containing many divers and strange elements. The exclamation so often heard from visitors to Angkor the Magnificent:—"I never saw the like in the whole of the world" is therefore well understandable.

Finally a word about the human types depicted in the bas-reliefs of Angkor Wat. We have seen that Dr. McFarland says that they resemble Cochinchinese, and that that saying cannot mean the Annamite population of present day Cochinchina. Mouhot thinks that the type of the sculptures resembles that of the Khā. M. Marchal says that the type of soldiers and chiefs represented on the bas-reliefs in the great temple of Bantay Chmar corresponds exactly to the physical type of the Maya priests and warriors as depicted on *their* sculptures. Common for these two types are the flat skulls, narrow foreheads, receding chins, curved noses, fleshy and hanging lips. This statement is of more than ordinary interest as it may point to a common origin of the Khā and Amerindians. The Khā or Moi population is, however, far from being homogeneous, several of their largest tribes being closely related to the Chām or Malays. The problem raised by M. Marchal's investigations should be taken up for further examination by competent anthropologists without delay.

When Mouhot and later Dr. McFarland and his party visited Angkor Wat, many parts of that splendid fane were much ruined and everything, with the exception of the chausées and upper

portions of the towers, was overgrown with thick thorny jungle, which made all movements difficult.

Next to destructive man the luxuriant tropical vegetation, especially the banian trees with their long penetrating air roots, is the most deadly enemy of deserted monuments even if these be massive stone buildings. Once the roots of such a parasite has got inside a tiny crack in a wall, they will little by little succeed in widening that crack and in the end break the whole wall asunder! Even some years after the French had taken over the temple area of Angkor access to the ruins was very difficult, due to the thick jungle surrounding them, as will be seen from the excellent photographs published in a contemporaneous album called "*Indo-Chine, pittoresque et monumentale—Ruins d'Angkor*" by M. Dieulefils. All this has long ago been altered for the better, thanks to the energetic and careful labours carried out by the Archaeological Service of the *Ecole Française d'Extrême-Orient*.

Led by such master architects and savants as Parmentier and Marchal, not to forget Comaille the pioneer, the great work of cleaning up and restoring has now gone on for years. The jungle has been cut down and the huge temple thoroughly cleaned out, and overall where repairs were possible and justified repairs have been made with the material on the spot. Stones fallen down have been put back into their original place; cracks, through which the rain was penetrating, have been closed, and all has been carried out in such a way that large portions of this beautiful temple can no longer be called ruins. The French archaeological service has merited well, not only of the Fatherland, and this includes the Land of the Khmer, but of the whole of the civilized world, and especially among all those who love art for art's sake.

Bangkok, 23rd May, 1937.

ERIK SEIDENFADEN.

