Through Central Borneo

Carl Lumholtz

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An Account of Two Years' Travel in the Land of Head−Hunters
Between the Years 1913 and 1917

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THROUGH CENTRAL BORNEO

AN ACCOUNT OF TWO YEARS' TRAVEL IN THE LAND OF THE HEAD−HUNTERS BETWEEN THE YEARS 1913 AND 1917

BY

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WITH ILLUSTRATIONS FROM PHOTOGRAPHS BY THE AUTHOR AND WITH MAP

We may safely affirm that the better specimens of savages are much superior to the lower examples of civilized peoples.

Alfred Russel Wallace.

PREFACE

Ever since my camping life with the aborigines of Queensland, many years ago, it has been my desire to explore New Guinea, the promised land of all who are fond of nature and ambitious to discover fresh secrets. In furtherance of this purpose their Majesties, the King and Queen of Norway, the Norwegian Geographical Society, the Royal Geographical Society of London, and Koninklijk Nederlandsch Aardrijkskundig Genootschap, generously assisted me with grants, thus facilitating my efforts to raise the necessary funds. Subscriptions were received in Norway, also from American and English friends, and after purchasing the principal part of my outfit in London, I departed for New York in the autumn of 1913, en route for the Dutch Indies. In 1914, having first paid a visit to the Bulungan, in northeast Borneo, in order to engage the necessary Dayaks, I was preparing to start for Dutch New Guinea when the war broke out.

Under these changed conditions his Excellency, the Governor−General, A.W.F. Idenburg, regretted his inability to give me a military escort and other assistance needed for carrying out my plan, and advised me to await a more favorable opportunity. During this interval, having meanwhile visited India, I decided to make an expedition through Central Borneo, large tracts of which are unexplored and unknown to the outside world. My project was later extended to include other regions of Dutch Borneo, and the greater part of two years was spent in making researches among its very interesting natives. In these undertakings I received the valuable assistance of their Excellencies, the governor−general and the commanding general, as well as the higher officials of the Dutch Government, to all of whom I wish to express my heartfelt thanks.

Through the courtesy of the well−known Topografische Inrichting, in Batavia, a competent surveyor, whose work will later be published, was attached to my expeditions. He did not accompany me on my first visit to the Bulungan, nor on the second occasion, when I went to the lake of Sembulo, where the country is well known. In the map included in this book I have indicated the locations of the different tribes in Dutch Borneo, based on information gathered from official and private sources and on my own observations.

I usually had a taxidermist, first a trained Sarawak Dayak, later a Javanese, to collect mammals and birds. Fishes and reptiles were also preserved in alcohol.

Specimens of ethnological interest were collected from the different tribes visited; the collection from the Penihings I believe is complete. Measurements of 227 individuals were taken and as soon as practicable will be worked out by Doctor K.S. Schreiner, professor at the University of Christiania. Vocabularies were collected from most of the tribes. In spite of adverse conditions, due to climate and the limitations under which I travelled, a satisfactory collection of photographic plates and films was brought back. With few exceptions, these photographs were taken by myself. For the pictures facing page 26 I am indebted to Doctor J.C. Koningsberger, President of the Volksraad, Buitenzorg, Java. Those facing pages 16 and 17 were taken by Mr. J.F. Labohm. The lower picture facing page 286 was taken by Mr. A.M. Erskine.

My observations on the tribes are recorded in conformity with my itinerary, and include the Kayans, Kenyahs, Murungs, Penyahbongs, Saputans, the nomadic Punans and Bukits, Penihings, Oma−Sulings, Long−Glats, Katingans, Duhoi (Ot−Danums), and the Tamoans. On one or two occasions when gathering intelligence from natives I was very fortunate in my informants—an advantage which will be appreciated by any one who has undertaken a similar errand and has enjoyed the keen satisfaction experienced when drawing the veil from primitive thought which lies so near and yet so far away.

Circumstances naturally prevented me from making a thorough study of any tribe, but I indulge the hope that the material here presented may prove in some degree acceptable to the specialist as well as to the general reader. Matter that was thought to be of purely anthropological interest is presented in a special supplement. Above all, I have abstained from generalities, to which one might be tempted on account of the many similarities encountered in the tribes that were visited. Without the light of experience it is impossible to imagine how much of interest and delight there is in store for the student of man's primitive condition. However, as the captain of Long Iram said to me in Long Pahangei, “One must have plenty of time to travel in Borneo.” I have pleasure in recording here the judicious manner in which the Dutch authorities deal with the natives.

On a future occasion I shall hope to be able to publish a detailed report on several of the novel features of my

Bornean collections, especially as regards decorative art, the protective wooden carvings called kapatongs, the flying boat, etc.

The first collections sent to Norway ran the risks incident to war. Most of them were rescued from the storehouses at Antwerp after the German occupation, through the exertions of the Norwegian Foreign Office, though a smaller part, chiefly zoological, appears to have been lost in Genoa. Count Nils Gyldenstolpe, of the Natural History Museum, Vetenskapsakademien in Stockholm, who is determining the mammals collected, informs me that so far a new species of flying maki and two new subspecies of flying squirrels have been described.

To further my enterprise, liberal gifts of supplies were received from various firms in Christiania: preserved milk from Nestle &Anglo−Swiss Condensed Milk Co., tobacco from Tiedemann's Fabrik, alcohol for preserving specimens from Loitens Braenderi, cacao from Freia Chokolade Fabrik. A medical outfit was presented by Mr. E. Sissener, Apotheket “Kronen,” Christiania, and Messrs. Burrows, Wellcome &Co., of London, placed at my disposal three of their excellent medicinal travelling−cases.

I want to express my appreciation of many services rendered by the Nederlandsche Handel−Maatschappij and its branches, especially the Factorij in Batavia. I am under similar obligations to the Koninklijke Paketvaart−Maatschappij, and my thanks are also due to De Scheepsagentuur for courtesies received. Miss Ethel Newcomb, of New York, has kindly transcribed the two songs rendered.

Finally I desire to make grateful acknowledgment of valuable assistance rendered by Doctor J.C. Koningsberger, and by Doctor W. van Bemmelen, director of Koninklijk Magnetisch en Meteorologisch Observatorium, Weltevreden, Batavia.

Although force of circumstances altered the scope and to some extent the character of this expedition, nevertheless my Bornean experiences afforded great satisfaction. Moreover, my sojourn in the equatorial regions of the East has imbued me with an even stronger desire to carry out my original purpose, which I hope to accomplish in the near future.

CARL LUMHOLTZ

NEW YORK, April, 1920.

CHAPTER I

DEPARTURE FROM NEW YORK—A RACE WITH THE IMPERIAL LIMITED—IMPRESSIONS OF JAPAN—SINGAPORE—ARRIVAL AT BATAVIA, JAVA—BUITENZORG—BORO BUDUR, THE WONDROUS BUDDHIST MONUMENT

Having concluded important business matters during a brief stay in New York, I decided to go to Canada to take the express train for Vancouver. It was the last train which made connection with the Canadian Pacific steamer for Hong−Kong, and if I could make it I should save three weeks. With the assurance that I should have a couple of hours latitude, I started in the morning for Montreal. There was no doubt that I should make it unless something unusual delayed the north−bound train, and that is exactly what occurred. The steam power of the brake got out of order, necessitating a stop for repairs, and considerable time was lost. Darkness came on and I began to feel anxious about the prospect of gaining my object.

The conductor and his assistant, in the knowledge that I had a through ticket to Hong−Kong, did everything in their power to aid me. Wire messages were sent to have the Imperial Limited Express wait for “a man travelling first−class”; to the custom−house, and also for a cab and four “red caps” to meet me on arrival. The assistant conductor told everybody of the plight of the passenger with the long journey before him, the engineer was prevailed upon to increase his speed; and the passengers began to exhibit interest. A tall Canadian came to me and expressed his belief that I would catch that train, and even if it should be gone there was another a little later by which it might be overtaken. “I shall assist you,” he added.

As we approached Montreal there were still twelve minutes left. The lights of the city were visible near by, and one of my fellow passengers was in the act of assuring me that my chances were good, when our train suddenly stopped—on account of the bridge being open to permit a ship to pass. Ten minutes lost! I had decided, if necessary, to sacrifice two boxes of honey which I had bought at the last moment, honey and water being my usual drink when on expeditions. The total weight was ninety kilograms, but they were neatly packed in paper and had been allowed to stand at one side of the entrance to the Pullman car. They were an important adjunct of my outfit, but perhaps after all it would be necessary for us to part.

Immediately upon the opening of the doors the four porters presented themselves with the encouraging information that they understood the Imperial Limited was waiting. My luggage, including the honey, was hurried on to a large truck, my Canadian friend throwing his on too, and speeding the boys to a trot, we ran as fast as we could to the baggage−room of the custom−house, where the official in charge caused us only a short delay. As the packages were being loaded into three cabs a man stepped forward and accosted me: “We have got you now! I am a reporter for *The Star*, and would like to know who the man is that keeps the Imperial Limited waiting!” The moment did not seem favourable for an interview, but I invited him to enter my cab and the two or three minutes required to drive to the station afforded opportunity for an explanation:

I was on my way to New Guinea. This was a Norwegian undertaking which had the support of three geographical societies. It was hoped that a geologist and a botanist from Norway would meet me next year in Batavia to take part in this expedition to one of the least−known regions on the globe. “What do you expect to find?” he asked just as we halted.

The porters outside said the train was gone, having waited fifteen minutes. The newspaper man immediately joined forces with my Canadian friend, and they were equally determined that by some means I should overtake that train. First we went to look for the station−master, hoping through him to obtain permission to have the train stopped en route. When found after a few minutes' search, he tried in vain to get one of the officials of the Canadian Pacific Company on the telephone. My two friends stood near to keep his interest active, but he did not seem to succeed. The station was quiet and looked abandoned. It was after ten o'clock and at that time of the evening the hope of reaching an official at his residence seemed forlorn.

Meantime I had my luggage ready to throw aboard the 10.30 express, which was my one chance in case the Imperial Limited could be halted. The three men were persistent but finally, two or three minutes before the departure of the express, they came to me hurriedly and said: “You had better go by this train to North Bay, where you will arrive at 9.30 to−morrow morning. There you will catch the train, or if not you can return here.” There

appeared to me small prospect that the three men would succeed in obtaining the desired permission, but I had no time for reflection. The train was ready to start and my luggage was hastily thrown to the platform of the car. I bade the gentlemen a hurried good−bye, thanking them for all the trouble they had taken. “You are going to catch that train!” the reporter exclaimed in a firm and encouraging tone. “But what do you expect to find in New Guinea?” he suddenly inquired as I jumped on to the slowly moving train.

Reflecting that in the worst case I would be back in Montreal in one and a half days, I fell asleep. At 6.30 in the morning I was awakened by the voice of the porter saying, “the train is waiting for you, sir,” as he rolled up the curtain. It really was the Imperial Express! The big red cars stood there quietly in the sunshine of the early morning. In a few minutes I was dressed, and never with greater satisfaction have I paid a porter his fee.

The station was Chalk River, and the train had waited forty minutes. What a comfortable feeling to know that all my belongings were safely on board! I had not only saved time and money but an interesting trip across the continent lay before me. Having washed and put on clean garments, I had my breakfast while passing through an enchanting hilly country, amid smiling white birches, and the maples in the autumn glory of their foliage, with more intensely red colouring than can be seen outside North America. The oatmeal porridge seemed unusually well prepared: the waiter intimated that the cook was a Parisian. However that might have been, he was probably of French descent.

Four days later we arrived at Vancouver, where I wrote to the three gentlemen of Montreal, my appreciation of services rendered, addressing them care of *The Star*. Their names I did not know, but it was not the first time that I had been reminded of Darwin's assurance, in the account of his travels round the world, as to “how many truly kind−hearted people there are, with whom he (the traveller) never before had, nor ever again will have any further communication, who yet are ready to offer him the most disinterested assistance.”

Early in the morning on October 19 we saw the first Japanese fishing−boats. The sea was green and in the atmosphere a kind of haze, which almost seems peculiar to Japan, imparted an artistic tone to everything. In splendid weather, almost calm, we sailed along the coast of Nippon. As we entered the bay of Yokohama the sun was setting over a landscape that realised one's preconceived ideas of the beauty of the country. On one side, low ridges with rows of picturesque pine−trees just as you know them from Japanese prints, while in the background to the west, above the clouds rose the top of Fuji, nearly 4,000 metres above sea−level. We steamed up in absolute calm, while the long twilight was still further prolonged by a brilliant afterglow.

Taking advantage of the permit to leave the steamer and rejoin it in Kobe, and having received useful advice from Cook's representative who came on board, I immediately went ashore. On calling a rickshaw I was much surprised to find that the man spoke English quite well. He trotted continuously twenty minutes, to the railway station, where in good time I caught the train for the West, and at daybreak I was ready to observe the beautiful country through which we passed. I had made no provision for breakfast, but one of my fellow travellers, who came from Tokio, had the courtesy to offer me two snipe with bacon, which tasted uncommonly well.

In the morning I arrived at Kioto, the city of many temples, and found the Kioto hotel satisfactory. I shall not attempt to describe in detail the fascination of the two days I spent here, where one still may see something of old Japan. In Kobe, Nagasaki, and other cities exposed to the stream of travellers, Western influence is evident everywhere, and the inhabitants are less attractive on that account. After all one has heard and read about the charm of the country, one is inclined to think that the reports are exaggerated, but as far as my brief experience in Nippon goes, it is the most beautiful and interesting country that I have visited, and I hope in the future to know it better.

The deepest impression made upon me by the Japanese was that they are all so active, healthy, and strong; always good−tempered, their manners are exquisite, even the plain people bowing to each other, and many young people saluted me on the street. The infinite variety in their shops is noticeable. To see the coaling of the steamers in Japanese harbours, which is done by baskets handed from one to another, makes an impression on the traveller. Hundreds of women and men take part in the occupation, and they come neatly dressed to this dirty work, women with clean white kerchiefs on their heads. The low ditches in their rice−fields are like engineering work, and their bundles of wood are nicely tied.

Of the many temples I visited in Kioto the first was Chion−in, which lies impressively on an elevation at the foot of a charming wooded hill. The tiny lake at the back of the quaint structure, the peaceful atmosphere, the sunshine, and singing birds—the *tout ensemble* was inexpressibly beautiful. On my way back to the hotel I passed

a Christian church and felt ashamed of the wretched architecture, in the usual conventional style, made of stone with white−plastered walls, hard and unattractive. Never have I been among a people so close to nature, strikingly intelligent, friendly, and the most aesthetic of all nations on the globe.

In continuing the journey opportunity is afforded to see Shanghai, Hong−Kong, and at last Singapore, the important port of the Malay Peninsula. Singapore, with its green lawns and trees, has a pleasant, though humid climate, cooler than that of Batavia, and quite comfortable although so near the equator. It is satisfying to know one place where the native races have a good time in competition with the whites, not only the Chinese, who have reached power and influence here, but also the Malays, natives of India, Arabs, etc. The Chinese rickshaw men here are of superb physique, and the excellence of the service renders this the most agreeable method of getting about. Moreover, it is a pleasure to watch their athletic movements and long easy stride, as if they were half flying. Some of them pass the carriages. They are jolly, like big children, and are natural teetotalers, but they sometimes fight about money among themselves.

After securing a Chinese photographer and a trained native collector of zoological specimens, I embarked in the excellent Dutch steamer *Rumphius* for Batavia where I arrived on the 10th of November. The first thing to be done was to ask an audience of the Governor−General of Netherlands India, who usually stays at Buitenzorg, the site of the world−famous botanical gardens. It is an hour's trip by express from Batavia, and although only 265 metres higher, has a much pleasanter climate. The palace, which is within the botanical gardens, has an unusually attractive situation, and the interior is light, cool, and stately. His excellency, A.W.F. Idenburg, most courteously gave the necessary orders for the furtherance of my proposed expedition to New Guinea, and as it was necessary for me to go first to Dutch Borneo, to secure a Dayak crew, he provided me with an introduction to the Resident of the South and Eastern Division.

During the few days I stayed in Buitenzorg, the botanical gardens were a source of ever new delight. It was in the latter half of November and thus well into the rainy season. Usually showers came every afternoon, but the mornings, even up to eleven o'clock, always appeared like spring−time, only in a more magnificent edition than that of temperate zones. In the effulgence of light and the fresh coolness of the first hours of the day, plant and animal life seemed jubilant. After the calm and heat of midday, violent thunder−storms of short duration may occur, but the evenings are generally beautiful, although the prevailing inclination is to retire early. In the tropics one realises more readily than elsewhere how a single day contains all the verities and realities of one's whole life: spring, summer, and autumn every day, as in a year or in a lifetime. Australians and Americans who visit Java every year make a great mistake in selecting the dry season, April to July, for their travels. To be sure, one is not then troubled by rain, but on the other hand the heat is greater, the country becomes dry, and including the botanical gardens, loses much of its attraction.

I decided to go by rail to Soerabaia, the point of steamboat connection with Borneo; this would give me opportunity to see Java besides saving some time. After twelve hours' travel by express the train stops for the night at Djokjakarta where there is a good hotel. We now find ourselves in a region which formerly was the main seat of Buddhism in Java. The world−famous monument, Boro Budur, is in the neighbourhood to the north in the district of Kedu, and by motor−car a visit may easily be made in one day, but for those who can spend more time on this interesting excursion there is satisfactory accommodation in a small hotel near by. The government has of late years successfully restored this magnificent ancient structure which at its base forms a square, with the length of the side 150 metres, and rises to a height of more than 30 metres. At first sight it does not seem as large as expected, but on entering the first gallery one is struck by the monumental magnitude and unique beauty of the edifice.

Built upon a small hill from blocks of trachyte, it consists of twelve terraces rising one above another, and connected by staircases. The uppermost terrace, fifteen metres in diameter, has a dome. Each gallery is surrounded by a wall adorned with niches in handsome settings, each containing a life−sized Buddha, with legs crossed, soles turned downward. There are 432 such niches, and from this great number of statues of the famous religious founder the place probably derived its name, Boro Budur equals Bara Buddha (Buddhas without number).

There are no less than 1,600 has reliefs, handsome carvings in hard stone mostly representing scenes from the life of Buddha and “which must,” says Wallace, “occupy an extent of nearly three miles in length. The amount of human labour and skill expended on the Great Pyramids of Egypt sink into insignificance when compared with

that required to complete this sculptured hill−temple in the interior of Java." It dates from the eighth or ninth century after Christ, and in reality is not a temple, but a so−called dagoba, dedicated to the keeping of some Buddhist sacred relic which was deposited in the dome, its principal part. In the beautiful light of afternoon the walk through the galleries was especially impressive. From that vantage point there is presented a fine, extensive view of a peaceful landscape, and at the time of my visit an actively smoking volcano in the far distance added a picturesque feature. In the vicinity is another noble Hindu structure, the so−called temple of Mendut, inside of which is found a large and singular Buddha sitting on a chair, legs hanging down. The figure is nude and the expression on its features is very mild.

The journey from Djokjakarta to Soerabaia consumes about half a day and the trip is pleasanter than that of the previous day, when the rolling of the fast express on a narrow−gauge track was rather trying, while at dinner−time the soup and water were thrown about in an annoying manner. I have no doubt that this defect will soon be remedied, for Java is still what a very distinguished English visitor said sixty years ago: "the very garden of the East and perhaps upon the whole the richest, best cultivated, and best governed tropical island in the world." Soerabaia is the great shipping port for sugar, tobacco, etc., and a more important commercial centre than Batavia. The day after my arrival I started for Borneo where I intended to proceed to the Kayan or Bulungan River in the Northeast. It was my purpose to take advantage of the occasion to acquaint myself with that district and its natives which would extend my travels by a few months.

CHAPTER II

BORNEO—CLIMATIC AND BIOLOGICAL CONDITIONS—NATURAL RESOURCES—POPULATION— HISTORY—GOVERNMENT OF THE NATIVES—RACIAL PROBLEMS

Leaving Greenland out of consideration, Borneo is the second largest island on the globe, the greater part of it, southern and eastern, belonging to Holland. In a recent geological period this island as well as Java and Sumatra formed part of Asia. A glance at the map shows that Borneo is drained by rivers which originate in the central region near each other, the greater by far being in Dutch territory, some of them navigable to large steam launches for 500 or 600 kilometres. The principal chain of mountains runs, roughly speaking, from northeast to southwest, the average height being perhaps 1,000−1,500 metres, with higher peaks now and then. There are also ranges from east and west. The remainder is irregular hilly country, with low swampy coasts. The highest mountain is Kinabalu, in the north, about 4,500 metres above the sea and composed of “porphyritic granite and igneous rocks.” There are no active volcanoes. The whole island is covered with forest vegetation from the coasts to the tops of the hills and ranges.

The climate is humid and warm and remarkably even, the thermometer in the inland rarely reaching above 85 F. in the shade. Rain is copious most of the year; at night it sometimes rains continuously; but a day of uninterrupted downpour did not occur during my two years of travel. It comes in showers, usually lasting an hour or two, when it clears as suddenly as it began, and within half an hour all is dry again. In the interior, on account of the vast jungles, except in case of thunderstorms, which are rare, there is no wind, but on the coasts one may encounter storms in the time of both the northeast and the southwest monsoons. Though Borneo and the central mountains of New Guinea have the greatest rainfall in the Malay Archipelago, there is a distinct dry season, which is mostly felt during April, May, and June, but is less noticeable in the central parts. As regards the distribution of rain and dry weather, some difference was experienced as between the two years, and a planter of several years' experience in the south told me that one year is not like another. In spite of the general supposition to the contrary the climate of Borneo is quite pleasant, and probably less unhealthful than most equatorial regions, particularly in the central part where malaria is rare and prickly heat does not occur.

Borneo has very many useful trees, notably hard woods. Rubber is still a source of income to the Malays and Dayaks, and the rattan and bamboo, on which the very existence of the natives depends, grow everywhere. The sago−palm and a great number of valuable wild fruits are found, such as the famous durian, mangosteen, lansat, rambutan, and others. The climate seems to be specially suited to fruit, the pineapple and pomelo reaching their highest perfection here. The coconut−palm thrives on the island. Borneo is famous for its orchids and most of the species of pitcher−plants (*nepenthes*) are found here, the largest of which will hold two “quarts” of water.

The elephant, rhinoceros, tapir, wild cattle, and many other kinds of smaller animals of Asia are found in Borneo. No Indian tigers are in the country, though many varieties of the cat family are there, among them the beautiful large *felis nebulosa*. Wild pigs of many species roam the jungle in abundance. Several kinds of mammals are peculiar to the island, among which may be mentioned the long−nosed monkey (*nasalis larvatus*). There are over 550 species of birds, but the individuals of the species are not numerous; the pheasant family is especially gorgeous in form and colour. The rivers and the surrounding sea swarm with fish of many kinds, furnishing an abundance of food, although generally not very palatable. The djelavat, in flavour not unlike salmon, and the salap, both of which I met in the upper courses of the rivers Samba, Barito, and Mahakam, are notable exceptions.

The mineral resources of Borneo are very considerable; coal, gold, iron, diamonds, tin, and antimony are among the most valuable. Anthracite coal is not found in the country, that which is in evidence being from the tertiary period. Gold is everywhere, but thus far is not found in sufficient quantity to pay. Formerly the natives of the upper Kotawaringin district had to pay the Sultan gold as a tax. A mining engineer told me that in Martapura, the principal diamond−field, one may find gold, platinum, and diamonds while washing one pan.

The total population of the island is probably 3,000,000. As regards the South and Eastern Division of Dutch Borneo—roughly half of the island—to which my travels were confined, the census returns of 1914 give in round figures a total of 906,000 people, of whom 800 are Europeans (470 men and 330 women), 86,000 Chinese,

817,000 Dayaks and Malays, and 2,650 Arabs and other aliens. Of these peoples no less than 600,000 live in a comparatively small area of the southeast, the districts of Oeloe Soengei and Bandjermasin. These are nearly all Malays, only 4,000 or 5,000 being Dayaks, who probably do not form the majority of the 217,000 that make up the remainder of the native population of the Division.

On account of the small white population and insufficient means of communication, which is nearly all by river, the natural resources of Dutch Borneo are still in the infancy of development. The petroleum industry has reached important proportions, but development of the mineral wealth has hardly begun. In 1917 a government commission, having the location of iron and gold especially in view, was sent to explore the mineral possibilities of the Schwaner Mountains. In the alluvial country along the rivers are vast future possibilities for rational agriculture, by clearing the jungle where at present the Malays and Dayaks pursue their primitive operations of planting rice in holes made with a pointed stick.

The early history of Borneo is obscure. Nothing in that regard can be learned from its present barbarous natives who have no written records, and few of whom have any conception of the island as a geographical unit. Although the Chinese had early knowledge of, and dealings with, Borneo, there seems little doubt that the country was first colonised by Hindu Javanese from Modjopahit, the most important of the several kingdoms which Hindus began to found in the early centuries after Christ. Modjopahit enclosed the region round the present Soerabaia in East Java, and it was easy to reach Borneo from there, to−day distant only twenty−seven hours by steamer. These first settlers in Borneo professed Hinduism and to some extent Buddhism. They founded several small kingdoms, among them Bandjermasin, Pasir, and Kutei, also Brunei on the north coast. But another race came, the Malays, who with their roving disposition extended their influence in the coast countries and began to form states. Then Islamism appeared in the Orient and changed conditions. Arabs, sword in hand, converted Java, and as far as they could, destroyed temples, monuments, and statues. The Malays, too, became Mohammedans and the sway of Islam spread more or less over the whole Malay Archipelago. With the fall of Modjopahit in 1478 the last vestige of Hindu Javanese influence in Borneo disappeared.

The Malays established sultanates with the same kind of government that is habitual with Mohammedans, based on oppression of the natives by the levying of tribute with the complement of strife, intrigue, and non−progress. In the course of time the Malays have not only absorbed the Hindu Javanese, but also largely the Bugis, who had founded a state on the west coast, and in our time they are gradually pushing back the Dayaks and slowly but surely absorbing them. The Chinese have also played a prominent part in the colonisation of Borneo, having early developed gold and diamond mines and established trade, and though at times they have been unruly, they are today an element much appreciated by the Dutch in the development of the country.

As regards the time when European influence appeared in Borneo, the small sultanate of Brunei in the north was the first to come in contact with Europeans. Pigafetta, with the survivors of Magellan's expedition, arrived here from the Moluccas in 1521, and was the first to give an account of it to the Western world. He calls it “Bornei,” which later, with a slight change, became the name of the whole island. The ever−present Portuguese early established trade relations with the sultanate. Since the Napoleonic wars, when the East Indian colonies were returned to Holland, the Dutch have gradually extended their rule in Borneo to include two−thirds of the island. In the remainder the British have consolidated their interests, and in 1906, the European occupation of Borneo was completed. The distribution of territory has roughly been placed thus: Dutch Borneo, seventy per cent; Sarawak and Brunei, twenty per cent; British North Borneo, ten per cent.

To the world at large Borneo is probably best known through the romance surrounding the name of James Brooke, who became Raja of Sarawak, in 1841. His story has often been told, but a brief account may not be out of place. He had been to the Far East and its fascination, together with an impulse to benefit the natives, drew him back again. After resigning his commission in the army of the British East India Company, he built his own yacht of 140 tons, practised his crew in the Mediterranean and then set sail for the Malay Archipelago. In his *Proposed Exploring Expedition to the Asiatic Archipelago*, 1838, are found these stirring words which strike a responsive chord in the heart of every true explorer:

“Imagination whispers to ambition that there are yet lands unknown which might be discovered. Tell me, would not a man's life be well spent—tell me, would it not be well sacrificed in an endeavour to explore these regions? When I think of dangers and death I think of them only because they would remove me from such a field for ambition, for energy, and for knowledge.” [*]

[Footnote *: *The Expedition to Borneo of H.M.S. "Dido" for the Suppression of Piracy*, by Captain H. Keppel, p. 374. Harper's, New York, 1846.]

Mr. Brooke arrived at Sarawak where he remained some time, surveying the coast and studying the people. In those days Malay pirates rendered the country dangerous to approach and several ships had been lost and their crews murdered. One of the chronic rebellions against the Sultan of Brunei was raging at the time, and Mr. Brooke was asked to suppress it, was made Raja, and defeated the rebels, cleared the river of pirates and established order.

Though Mohammedan laws were maintained in Sarawak, the worst abuses were purged out, as for instance, the death penalty for conjugal infidelity, and the sufficiency of a fine in extenuation of a murder. As for the Dayaks who formerly were cheated by Malay traders and robbed by Malay chiefs, they were permitted to enjoy absolute safety. Both Raja Brooke and his nephew, who succeeded him in the same spirit, followed the policy of making use of the natives themselves in governing, and Sarawak to−day enjoys the distinction of being a country where the interests of the natives are guarded with greater care than those of "the minority of superior race." Resting on the good−will of the natives and their uplift, the government of the two white Rajas has been remarkably successful.

The Dutch, with their much larger possessions, in a similar way have invoked the co−operation of the native chiefs. Their government is also largely paternal, which is the form best suited to the circumstances. The Malay Sultans maintain power under Dutch control and receive their income from the government, which has abolished many abuses. As for the pagan tribes, they are treated with admirable justice.

Well administered by Europeans as Borneo undoubtedly is, the question may well arise as to whether the natives are not becoming sufficiently civilised to render purposeless expeditions to study them. To this may be answered that in a country so vast, where white men are comparatively few in number, the aborigines in the more remote part are still very little affected by outside influence. The geographical features are an important factor here. In the immense extent of forest vegetation which covers the land from the sea to the tops of the mountains, the rivers are the only highways, and in their upper courses, on account of rapids and waterfalls, travel is difficult and often dangerous. Although in the last quarter of a century much has been accomplished by ethnology, still for years to come Borneo, especially the Dutch part of it, will remain a prolific field for research. The tribes are difficult to classify, and in Dutch Borneo undoubtedly additional groups are to be found. The Muruts in the north, who use irrigation in their rice culture and show physical differences from the others, are still little known. Many tribes in Dutch Borneo have never been studied. So recently as 1913 Mr. Harry C. Raven, an American zoological collector, in crossing the peninsula that springs forth on the east coast about 1 N.L., came across natives, of the Basap tribe, who had not before been in contact with whites. The problem of the Indonesians is far from solved, nor is it known who the original inhabitants of Borneo were, Negritos or others, and what role, if any, the ancestors of the Polynesians played remains to be discovered.

The generally accepted idea has been that the Malays inhabit the coasts and the Dayaks the interior. This is not strictly correct because the racial problems of the island are much more complicated. Doctor A.C. Haddon recognises five principal groups of people in Sarawak, Punan, Kenyah−Kayan, Iban or Sea Dayak, Malay, and the remaining tribes he comprehends under the noncommittal name Klemantan. He distinguishes two main races, a dolichocephalic and a brachycephalic, terming the former Indonesian, the latter Proto−Malay.

Doctor A.W. Nieuwenhuis, who about the end of the last century made important researches in the upper parts of the Kapuas and Mahakam Rivers and at Apo Kayan, found the Ot−Danum, Bahau−Kenyah, and Punan to be three distinct groups of that region. Doctor Kohlbrugge and Doctor Haddon consider the Ot−Danums as Indonesians, to whom the former also consigns the Kayans and the Punans. [*] Doctors Hose and McDougall, who in their *Pagan Tribes of Borneo* have contributed much to the ethnology of the island, have convincingly shown that the Ibans (Sea Dayaks) are recent immigrants, probably of only two hundred years ago, from Sumatra, and are Proto−Malays. They hold the view that the Kayans have imparted to the Kenyahs and other tribes the "principal elements of the peculiar culture which they now have in common."

[Footnote *: Quoted from *Pagan Tribes in Borneo*, II, p. 316]

The Malays undoubtedly were the first to employ the word Dayak as a designation for the native tribes except the nomadic, and in this they have been followed by both the Dutch and the British. The word, which makes its appearance in the latter part of the eighteenth century, is derived from a Sarawak word, dayah, man, and is

therefore, as Ling Roth says, a generic term for man. The tribes do not call themselves Dayaks, and to use the designation as an anthropological descriptive is an inadmissible generalisation. Nevertheless, in the general conception the word has come to mean all the natives of Borneo except the Malays and the nomadic peoples, in the same way as American Indian stands for the multitude of tribes distributed over a continent. In this sense, for the sake of convenience, I shall myself use the word, but to apply it indiscriminately to anthropological matters is as unsatisfactory as if one should describe a certain tribe in the new world merely as American Indian.

CHAPTER III

BANDJERMASIN, THE PRINCIPAL TOWN IN DUTCH BORNEO—NORTHWARD ALONG THE EAST COAST—BALIK PAPAN, AN OIL PRODUCING CENTRE—SAMARINDA—TANDJONG SELOR—THE SULTAN−UP THE KAYAN RIVER

Fifty miles from land the sea assumes a different aspect through the fresh water of the great Barito flowing on the surface. Its red hue is produced by particles of soil brought from the inland of Borneo. In the beginning of December I arrived at Bandjermasin, the principal town in Dutch Borneo, inhabited for the most part by Malays and Chinese. It is the seat of the Resident of the vast South and Eastern Division and has a garrison. The sea loudly announces its presence here, the tide overflowing much of the low ground, hence the Malay name, *bandjir* = overflow, *masin* = salt water. Large clumps of a peculiar water−plant float on the river in Bandjermasin in great numbers, passing downward with the current, upward with the tide, producing a singular, but pleasing sight. It is originally a native of America and has attractive light−blue flowers, but multiplies to such an extent that the growth finally may interfere with traffic. In India I saw a lagoon completely choked with it.

There is one hotel where the table is fair and the beds are clean, but blankets are considered unnecessary, and only sheets are provided. The climate was not as hot as I expected, nights and mornings being surprisingly cool. Early in July of the following year the morning temperature was about 73 F. (23 C). Malaria is rare here, but there are frequent indications of beri−beri.

Friends invited me to go on an excursion to a small island, Kambang, where there are a number of monkeys to whom Malays who desire children sacrifice food. On our arrival the animals came to meet us in a way that was almost uncanny, running like big rats in the tall grass on the muddy beach. Many remnants of sacrificial offerings were strewn about.

Two years later I was again in Bandjermasin, when an elderly American and his wife appeared upon the scene−tourists, by the way, being very unusual here. At the breakfast table they asked a young Dutchman the whereabouts of the church and museum, and he replied that he did not think there was either in the town. As a matter of fact there is a small wooden Dutch church hidden away in a back street. Moreover, in 1914 the Resident, who at that time was Mr. L.F.J. Rijckmans, had a house built, in Malay style of architecture, for the safekeeping of Bornean industrial and ethnological objects which had been on view at the exhibition at Samarang in Java, thus forming the nucleus of a museum which at some future time may be successfully developed. The Kahayan Dayaks, not far away to the north, make exquisite cigar−cases from rattan, while the Bugis weave attractive cotton goods, resembling silk, with an original and pleasing colour combination.

The Europeans have a lawn−tennis court where they usually play every afternoon. In Bandjermasin is the headquarters of a German missionary society whose activities are confined mainly to the Kahayan River. They are Protestants and worked for a great number of years without making any noteworthy impression on the natives, but of late years they have been more successful. Catholics, who came later, have a station on the Mahakam River. The government wisely has separated Protestant and Catholic missionary activities, restricting the former to the southern part of the country, the latter to the northern.

There is no difficulty about getting up along the east coast northward as far as the Bulungan, which was my immediate aim. The Royal Dutch Packet Boat Company adheres to a schedule of regular fortnightly steamship connection. On the way a stop is made at Balik Papan, the great oil−producing centre, with its numerous and well−appointed tanks and modern equipment, reminding one of a thriving town in America. One of the doctors in this prosperous place told me that his two children of four and six years enjoyed excellent health. Dysentery was prevalent among the coolies, and occasionally cases of malaria occurred, but malaria is found even in Holland, he added.

As we sailed up the Kutei River in the early morning, approaching Samarinda, an attractive scene presented itself. Absolute calm and peace reigned, a slight morning mist rising here and there before us and giving a touch of charm to the vista of modest white houses that stretched along the beach in their tropical surroundings. Samarinda lies almost on the equator, but nights and mornings are always cool, even to a greater degree than in Bandjermasin. Northeast Borneo and North Celebes have a comparatively cool climate, but from Samarinda

southward it is warmer. I called on the assistant Resident, in whose office a beautiful blue water−rail, with a red head, walked unconcernedly about. He advised me that this was the worst time for travelling, when the northwest monsoons, which are accompanied by much rain, are blowing.

The peace and contentment among the natives here, mostly Malays, impresses one favourably. They are all very fond of their children and take good care of them. The crying of children is a sound that is rarely heard. It was my fortune to travel over two years in the Dutch Indies; it is gratifying to state that during that time I never saw a native drunk, cit her in Java or Borneo. My visits did not extend to the Muruts in the north of Borneo, who are known to indulge excessively in native rice brandy. Nor was I present at any harvest feast, but according to reliable report, “strong drink is seldom or never abused" by the tribes of Borneo. The Muruts and the Ibans are the exceptions.

Two days later, among mighty forests of nipa−palms, we sailed up the Kayan or Bulungan River and arrived at Tandjong Selor, a small town populated by Malays and Chinese, the number of Europeans being usually limited to two, the controleur and the custom−house manager. It lies in a flat swampy country and on the opposite side of the river, which here is 600 metres wide, lives the Sultan of Bulungan. I secured a large room in a house which had just been rented by two Japanese who were representatives of a lumber company, and had come to arrange for the export of hardwood from this part of Borneo.

Accompanied by the controleur, Mr. R. Schreuder, I went to call on the Sultan. He was a man of about thirty−five years, rather prepossessing in appearance, and proud of his ancestry, although time has so effaced his Dayak characteristics that he looks like a Malay. Dato Mansur, his executive, met us at the landing and escorted us into the presence of the Sultan and his wife, where we were offered soda−water and whiskey, and we remained an hour. They are both likeable, but the Sultan appears rather nervous and frail, and it is rumoured that his health has suffered as a result of overindulgence in spiritualistic seances. He gave an entertaining account of natives living in the trees on the Malinau River. As it had been impossible for me to obtain cartridges for my Winchester rifle, the Sultan was kind enough to lend me one of his before we parted, as well as two hundred cartridges. He also obligingly sent Dato Mansur up the river to Kaburau, the principal Kayan kampong (village) to secure men and boats for an intended expedition inland from there.

The main business of Tandjong Selor, as everywhere in Borneo, is buying rattan, rubber, and damar (a kind of resin) from the Malays and the Dayaks, and shipping it by steamer to Singapore. As usual, trade is almost entirely in the hands of the Chinese. The great event of the place is the arrival of the steamer twice a month. When the whistle is heard from down the river a great yell arises from all over the town. The steamer is coming! People by the hundreds run down to the wharf amid great excitement and joy. Many Malays do not work except on these occasions, when they are engaged in loading and unloading. The principal Chinese merchant there, Hong Seng, began his career as a coolie on the wharf. He has a fairly well−stocked store with some European and American preserved articles, and was reliable in his dealings, as the Chinese always are. He was rich enough to have of late taken to himself a young wife, besides keeping his first one. His two young sons who assisted him had been at school in Singapore, and were proud to air their knowledge of English.

The house where I lived was on the main street, on the river bank, and in the evening the little shops on either side started playing nasty, cheap European phonographs the noise of which was most disagreeable. Most of the records were of Chinese music, the harsh quality of which was magnified tenfold by the imperfections of the instruments. When the nerve−wracking concert became intolerable, they were always good enough to stop it at my request.

However, there was one feature about this remote place which was repugnant—the prevalent flogging of children with rattan, mostly among the Mohammedan Malays. Not a day passed without wails and violent cries arising in some part of the town, especially during the forenoon, although I did not perceive that the children here were more incorrigible than elsewhere. The Dayaks never beat their children, and later I did not observe similar cruelty among Malays. Wise though King Solomon was, his precept not to spare the rod should be regarded in the light of his large family, “700 wives, princesses, and 300 concubines.” Even in the training of animals, better results are obtained by omitting the lash.

In the beginning of January, 1914, I was able to start for Kaburau. The controleur courteously provided for my use the government's steamship *Sophia*, which in six hours approached within easy distance of the kampong. My party consisted of Ah Sewey, a young Chinese photographer from Singapore whom I had engaged for developing

plates and films, also Chonggat, a Sarawak Dayak who had had his training at the museum of Kuala Lampur in the Malay Peninsula. Finally, Go Hong Cheng, a Chinese trader, acted as interpreter and mandur (overseer). He spoke several Dayak dialects, but not Dutch, still less English, for Malay is the lingua franca of the Dutch Indies as well as of the Malay Peninsula. As we anchored for the night I heard for the first time, from the hills that rose near by, the loud defiant cry of the argus pheasant. How wildly weird it sounds on a quiet evening!

The next morning the Kayans met us with boats to take us up to their kampong, Kaburau. Some women were pounding paddi (rice) under the large communal house which, in accordance with the custom of the country, was raised from the ground on posts. Dogs were much in evidence, both on the ground below and on the gallery of the house above. The canine species kept by the Dayaks have erect ears, are rather small and their colour is usually dull yellow. Here they were variously coloured, some entirely black, and fights among them were of frequent occurrence. Ascending the ladder I found a large tame bird of the stork family chained to the gallery, for the Dayaks often keep birds and animals in their houses.

The chief very hospitably had prepared one room for all four of us to lodge in, which did not exactly suit me, as I like to have a place where at times I may be *chez moi*, for the night at least. There was no suitable place outside for my tent, so I decided to paddle a few hundred kilometres up the river to a dilapidated camping−house for travellers, put up by the Dayaks under government order. Such a house is called pasang−grahan and may be found in many out−of−the−way places in Borneo.

Though generally crude and unpretentious huts where travelling soldiers or Malays put up, these shelters are very useful, especially for the night. There is another kind of pasang−grahan, comfortable structures provided with beds, similar to the rest−houses in India. In the more civilised parts these are built for the use of officials and other travellers. The one referred to had roof and walls of palm leaves, and as a matter of course, stood on piles. Though said to be only three years old it was already very shaky; still after clearing away the grass and some of the jungle next to it, we established quite a comfortable camp.

Chonggat brought in a number of birds and animals here, among them the lovely raja bird, snow−white except for the deep blue head, and with a very long graceful tail. It is also called paradise flycatcher (*terpsiphone*), and is found from Sumatra up into middle China. In Borneo it is quite common, being observed also on the Mahakam in the central part of the island. According to the legend, it formerly cost a man his life to kill it. This man soon showed himself to be an excellent worker who took his business very seriously and did not allow himself to be distracted when I amused visiting Kayans with simple moving pictures and by playing a music−box. The jungle, dripping with dew in the early morning, did not deter him, and at night it was his custom to shoot owls and hunt for deer or other animals. After arranging his tent with little or no help from the Dayaks, he would next put up a frame−work on which to dry his skins, under a roof of palm leaves; here a fire was always kept, without which the skins would have spoiled in that damp climate. Chonggat had a fine physique, was always pleasant and willing and was possessed of more than ordinary intelligence withal. Also keenly humourous, he enjoyed my initial mistakes in Malay, though maintaining a proper respect for the leader of the expedition.

In the evening, having retired for the day, he, as well as the Chinese photographer could be heard in their respective tents studying English from small guidebooks which they had brought along. He told me that his earnings were invested in a small rubber plantation which he and his brothers worked together. Chonggat was a good example of what a native of Borneo can accomplish under proper civilizing influences.

One morning he brought in a king cobra (*naia bungarus*) which he had shot, and as life was not yet extinct I got a good photograph of it. This serpent was about three metres long, but these very poisonous snakes, called ular tadong by the Malays, attain a length of seven metres. They are beautifully formed for quick movement, and will attack human beings, the female being particularly vicious when it has eggs. “When I see ular tadong coming toward me,” said Chonggat, who was no coward, “then I run.” There are several species of very poisonous snakes in Borneo, but according to my experience they are not very numerous. Two small ones, about thirty−five centimetres long, are the most common varieties encountered in the jungle. They are sluggish and somewhat similar in appearance, dark brown and red being the principal colours. One of them has its under side decorated with transverse sections of beautiful scarlet alternating with black.

Ah Sewey, the photographer, was also an efficient man, but at first we had immense difficulty with the developing. One cannot count on water cooler than 75 F., and at that temperature the films come out well, but in the beginning many plates were spoiled. For the photographer in the tropics the use of formalin is an absolute

necessity. He must also face other difficulties, avoiding among other things the possibility of having his films, when drying, eaten by small species of grasshoppers.

CHAPTER IV

AN EXPEDITION INTO THE JUNGLE—FIRST IMPRESSIONS—RAPID CHANGE IN THE DENSENESS OF VEGETATION—ANIMAL LIFE—A STUBBORN FIGHT

About the middle of January, I began an expedition into the utan, as the Malays call the great jungles of Borneo, first going up the river half a day and from there striking inland toward the north. If circumstances proved favourable, I intended to travel as far as Bengara, about twelve days' trip for a Dayak with a light burden to carry. In case of unfavourable weather and too much delay in getting fresh provisions, I felt that I should be satisfied in penetrating well into a region not before visited by whites, where I might succeed in coming into contact with the shy nomads, called Punans, known to roam there in limited numbers. To this end I had taken along one of the Sultan's petty officials, a so−called raja, who exercised more or less control over the Punans. This man, evidently half Malay and half Dayak, and as nude as the rest, demanded to be waited upon by the other natives, who even had to put up his hair. He was lazy; he would not be a raja if he were not. If he were on the move one day, he would sleep most of the next.

Among my twenty−two Kayans was an efficient and reliable man called Banglan, the sub−chief of Kaburau, who was alert and intelligent. He had only one hand, the result of a valorous fight with a crocodile, by which his prahu (native boat) had been attacked one day at dawn in a small tributary of the river. The animal actually upset the prahu and killed his two companions, in trying to save whom with no weapon but his bare hands, he lost one in the struggle. In their contact with the crocodiles the Dayaks show a fortitude almost beyond belief. A Dutch doctor once treated a man who had been dragged under water, but had the presence of mind to press a thumb into each eye of the reptile. He was badly mangled, but recovered.

As long as we remained at a low altitude camping out was not an unalloyed pleasure, because the tormenting gnats were exasperating, and at night the humidity was great, making the bed and everything else damp. The atmosphere was heavy and filled with the odor of decaying vegetable matter never before disturbed. In the morning at five o'clock, my hour for rising, there was considerable chill in the air. It was difficult to see a star here and there through the tall trees and dense undergrowth that surrounded us as closely as the walls of a cave.

The stagnant atmosphere and dark environment, which the sun's rays vainly attempted to penetrate, began to have a depressing effect on my spirits. After a couple of nights spent thus, a longing for sunshine came over me and I decided to stay one day, make a clearing, dry our belongings, and put up a shelter in which to leave some of our baggage; all of which could not be carried up the hills.

I told the raja and Banglan that I wanted the sun to shine into the camp, and the men immediately set to work with cheerful alacrity. The Dayaks have no rivals in their ability to make a tree fall in the desired direction. First, by carefully sighting the trunk, they ascertain the most feasible way for the tree to fall, then they chop at the base with native axes, sometimes four men working, two and two in unison. In a remarkably brief time it begins to weaken, the top making slight forward movements which are followed by a final sharp report announcing the end of their labour.

Quickly noting that they were masters in their craft, I permitted them to fell forest giants in close proximity to our tents, some of which landed but half a metre distant. Immense specimens in their fall brought down thickets of creepers and smaller growths which produced big openings, so we succeeded in making quite a sunny camp in the dark jungle.

Since that experience I have made it an invariable rule in my travels to cut a small clearing before putting up my tent in the jungle. Sometimes the felling of one or two trees will ameliorate the situation immeasurably, admitting fresh air and sunlight, and there is little difficulty about it when one is accompanied by such able and willing men as the Dayaks. For their own use when travelling they make simple shelters as night approaches, because they dislike to get wet. The material is always close at hand. Slender straight poles are quickly cut and brought in to make frame−work for a shed, the floor of which is about half a metre above ground. The roof is made of big leaves, and in less than an hour they are comfortably at home in one or more sheds, grouped around fires on the flimsy floor.

It is a curious fact that one can always manage to make a fire in these damp woods; a petroleum burner is not

essential. The natives always know where to go to find something dry that will burn; as for the white man's cook, he usually improves upon the situation by soaking the wood in petroleum, which is one of the valuable articles of equipment. Often in the jungle, when slightly preparing the ground for erecting the tent, phosphorescent lights from decayed vegetable matter shone in innumerable spots, as if a powerful lamp were throwing its light through a grating.

In ascending the hills it was surprising how soon the aspect of the vegetation changed. The camp we were just leaving was only about a metre above the Kayan River, so we probably were not more than twenty−odd metres above sea−level. Twenty metres more, and the jungle vegetation was thinner even at that short distance. Trees, some of them magnificent specimens of hard wood, began to assert themselves. Above 100 metres elevation it was not at all difficult to make one's way through the jungle, even if we had not had a slight Punan path to follow. It is easier than to ascend the coast range of northeast Queensland under 18 S.L., where the lawyer palms are very troublesome. Making a light clearing one evening we opened the view to a couple of tall trees called in Malay, palapak, raising their crowns high above the rest; this is one of the trees from which the natives make their boats. The trunk is very tall and much thicker near the ground.

Reaching a height of 500 metres, the ground began to be slippery with yellow mud, but the jungle impeded one less than the thickets around Lenox, Massachusetts, in the United States. Toward the south of our camp here, the hill had an incline of 45 degrees or less, and one hardwood tree that we felled travelled downward for a distance of 150 metres. A pleasant soft breeze blew for about ten minutes, for the first time on our journey, and the afternoon was wonderfully cool.

A Kayan messenger here arrived from the kampong, bringing a package which contained my mail, obligingly sent me by the controleur. The package made a profound impression on the Dayaks as well as on the Chinese interpreter, all of whom crowded around my tent to observe what would follow. I went elsewhere for a little while, but it was of no avail. They were waiting to see the contents, so I took my chair outside, opened and read my mail, closely watched all the time by a wondering crowd.

None of our attendant natives had been in this part of the country before except a Punan, now adopted into the Kayan tribe, who knew it long ago and his memory at times seemed dimmed. Fresh tracks of rhinoceros and bear were seen and tapirs are known to exist among these beautiful wooded hills. Chonggat succeeded in shooting an exceedingly rare squirrel with a large bushy tail. We finally made camp on top of a hill 674 metres in height which we called kampong Gunong.

The Dayaks helped me to construct a small shed with a fireplace inside where I could dry my wet clothing, towels, etc. Of their own initiative they also put up around the tent some peculiar Dayak ornamentations in the shape of long spirals of wood shavings hung on to the end of poles or trees which they planted in the ground. The same kind of decorations are used at the great festivals, and when a gentle wind set them in motion they had quite a cheerful, almost festive appearance.

Every morning, almost punctually at five o'clock, the gibbons or long−armed, man−like apes, began their loud chatter in the tree−tops, more suggestive of the calls of birds than of animals. They are shy, but become very tame in confinement and show much affection. A wah−wah, as the animal is called in this part of the world, will throw his arms around the neck of his master, and is even more human in his behaviour than the orang−utan, from which he differs in temperament, being more vivacious and inclined to mischief. In a kampong I once saw a young gibbon repeatedly descend into a narrow inclosure to tease a large pig confined there. The latter, although three or four times as large, seemed entirely at his mercy and was submissive and frightened, even when his ears were pulled by the wah−wah. During my travels in the jungle of Borneo, few were the days in which I was not summoned to rise by the call of the wah−wah, well−nigh as reliable as an alarm clock.

My stay here was protracted much longer than I expected on account of rain and fog, which rendered photographing difficult; one or the other prevailed almost continuously. Frequently sunlight seemed approaching, but before I could procure and arrange my camera it had vanished, and light splashes of rain sounded on my tent. This was trying, but one cannot expect every advantage in the tropics, which are so beautiful most of the year that I, for one, gladly put up with the discomforts of a wet season.

Rain−storms came from the north and northeast; from our high point of view, one could see them approaching and hear the noise of the rain on the top of the jungle many minutes before they arrived. A few times, especially at night, we had storms that lasted for hours, reaching sometimes a velocity of eighty kilometres an hour. The trees

of the jungle are naturally not exposed to the force of the wind, standing all together, so those surrounding our clearing seemed helpless, deprived of their usual support. Some smaller ones, apparently of soft wood, which had been left on the clearing, were broken, and the green leaves went flying about. On one occasion at dusk Banglan stood a long time watching for any suspicious−looking tree that might threaten to fall over the camp. Torrents of rain fell during the night and we could barely keep dry within our tents. The rain was more persistent here in the vicinity of the lower Kayan than in any other part of Borneo during my two years of travel through that country.

White−tailed, wattled pheasants (*lobiophasis*), rare in the museums, were very numerous here. This beautiful bird has a snow−white tail and its head is adorned with four cobalt−blue appendages, two above and two underneath the head. The Dayaks caught this and other birds alive in snares, which they are expert in constructing. I kept one alive for many days, and it soon became tame. It was a handsome, brave bird, and I was sorry one day to find it dead from want of proper nourishment, the Dayaks having been unable to find sufficient rain−worms for it.

The beautiful small deer, kidyang, was secured several times. Its meat is the best of all game in Borneo, although the Kayans look upon it with disfavour. When making new fields for rice−planting, if such an animal should appear, the ground is immediately abandoned.

Scarcely fifty metres below the top of the hill was our water supply, consisting of a scanty amount of running water, which stopped now and then to form tiny pools, and to my astonishment the Dayaks one day brought from these some very small fish which I preserved in alcohol. Naturally the water swells much in time of rain, but still it seems odd that such small fish could reach so high a point.

Many insects were about at night. Longicornes scratched underneath my bed, and moths hovered about my American hurricane lamp hanging outside the tent−door. Leeches also entered the tent and seemed to have a predilection for the tin cans in which my provisions and other things were stored. In the dim lamplight I could sometimes see the uncanny shadows of their bodies on the canvas, raised and stretched to an incredible height, moving their upper parts quickly to all sides before proceeding on their “forward march.” To some people, myself included, their bite is poisonous, and on the lower part of the legs produces wounds that may take weeks to cure.

One day native honey was brought in, which had been found in a hollow tree. It was sweet, but thin, and had no pronounced flavour. A few minutes after the honey had been left on a plate in my tent there arrived a number of large yellow hornets, quite harmless apparently, but persevering in their eagerness to feast upon the honey. During the foggy afternoon they gathered in increased numbers and were driven off with difficulty. The temporary removal of the plate failed to diminish their persistence until finally, at dusk, they disappeared, only to return again in the morning, bringing others much larger in size and more vicious in aspect, and the remaining sweet was consumed with incredible rapidity; in less than two hours a considerable quantity of the honey in the comb as well as liquid was finished by no great number of hornets.

Later several species of ants found their way into my provision boxes. A large one, dark−gray, almost black, in colour, more than a centimetre long, was very fond of sweet things. According to the Malays, if irritated it is able to sting painfully, but in spite of its formidable appearance it is timid and easily turned away, so for a long time I put up with its activities, though gradually these ants got to be a nuisance by walking into my cup, which they sometimes filled, or into my drinking−water. Another species, much smaller, which also was fond of sugar, pretended to be dead when discovered. One day at ten o'clock in the morning, I observed two of the big ants, which I had come to look upon as peaceful, in violent combat outside my tent. A large number of very tiny ones were busily attaching themselves to legs and antennae of both fighters, who did not, however, greatly mind the small fellows, which were repeatedly shaken off as the pair moved along in deadly grip.

One of the combatants clasped his nippers firmly around one leg of the other, which for several hours struggled in vain to get free. A small ant was hanging on to one of the victor's antennae, but disappeared after a couple of hours. Under a magnifying−glass I could see that each fighter had lost a leg. I placed the end of a stick against the legs of the one that was kept in this merciless vice, and he immediately attached himself to it. As I lifted the stick up he held on by one leg, supporting in this way both his own weight and that of his antagonist. Finally, they ceased to move about, but did not separate in spite of two heavy showers in the afternoon, and at four o'clock they were still maintaining their relative positions; but next morning they and the other ants had disappeared.

CHAPTER V

MEETING PUNANS, THE SHY JUNGLE PEOPLE—DOWN THE RIVER AGAIN—MY ENTHUSIASTIC BOATMEN−MALAYS VERSUS DAYAKS

At my request the raja, with a few companions, went out in search of some of the shy jungle people called Punans. Seven days afterward he actually returned with twelve men, who were followed by seven more the next day. All the women had been left one day's journey from here. These Punans had been encountered at some distance from kampong Bruen, higher up the river, and, according to reports, made up the entire nomadic population of the lower Kayan River. Most of them were rather tall, well−made men, but, as a result of spending all their lives in the darkness of the jungle, [*] their skin colour, a pale yellowish brown, was strikingly lighter, especially the face, than that of the Kayans.

[Footnote *: In von Luschan's table, Punan 15, Kayan 22.]

They actually seemed to hate the sun, and next day when it broke through the mist for a little while they all sought shelter in the shade of trees. As a result of their avoidance of direct rays from the sun they have a washed−out, almost sickly pale appearance, contrasting strangely with the warm tone of light brown which at times may be observed among the Dayaks. This is probably the reason why they are not very strong, though apparently muscular, and are not able to carry heavy burdens. They began at once to put up a shed similar to those of the Dayaks, but usually their shelters for the night are of the rudest fashion, and as they have only the scantiest of clothing they then cover themselves with mats made from the leaves of the fan−palm.

On the Upper Mahakam I later made acquaintance with some of the Punans who roam the mountainous regions surrounding the headwaters of that river. Those are known under the name Punan Kohi, from a river of that name in the mountains toward Sarawak. The members of the same tribe further east in the mountains of the Bulungan district are called Punan Lun, from the River Lun, to whom the present individuals probably belonged. According to the raja, there are two kinds of Punans here, and his statement seems to be borne out by the variations in their physical appearance.

These nineteen nomads had black hair, straight in some cases, wavy in others. Most of them had a semblance of mustache and some hair on the chin. Their bodies looked perfectly smooth, as they remove what little hair there may be. Some of them had high−arched noses. The thigh was large, but the calf of the leg usually was not well−developed, though a few had very fine ones; and they walked with feet turned outward, as all the Dayaks and Malays I have met invariably do. The only garment worn was a girdle of plaited rattan strings, to which at front and back was attached a piece of fibre cloth. Although dirty in appearance, only one man was afflicted with scaly skin disease. Visits to the hill−tops are avoided by them on account of the cold, which they felt much in our camp. Their dark−brown eyes had a kindly expression; in fact they are harmless and timid−looking beings, though in some parts of Borneo they engage in head−hunting, a practice probably learned from the Dayaks. Those I talked with said the custom was entirely discontinued, although formerly heads of other Punans, Malays, or Dayaks had been taken.

These natives, following no doubt an observance prevalent among the Dayaks, had some of their teeth filed off in the upper jaw, the four incisors, two cuspids, and two bicuspids. Our Kayans from Kaburau had no less than ten teeth filed off, the four incisors and three more on either side. The operation is performed when a boy or girl becomes full−grown. For the boys it is not a painful experience, but the girls have theirs filed much shorter, which causes pain and loss of blood.

The Punans make fire by iron and flint which are carried in a small bamboo box. They are expert regarding the manufacture of the sumpitan (blow−pipe), and are renowned for their skill in using this weapon and can make the poisonous darts as well as the bamboo caskets in which these are carried. Subsisting chiefly upon meat, their favourite food is wild pig.

At the birth of a child all the men leave the premises, including the husband. The dead are buried in the ground a metre deep, head toward the rising sun. The Punans climb trees in the same manner as the Kayans and other Dayaks I have seen, *i.e.*, by tying their feet together and moving up one side of the tree in jumps. The Kayans in climbing do not always tie the feet.

These shy nomads remained in camp two days and allowed themselves to be photographed. One morning seven of them went out to look for game, armed with their long sumpitans and carrying on the right side, attached to the girdle, the bamboo casket that contained the darts. They formed a thrilling sight in the misty morning as in single file they swung with long, elastic steps up the hill. Though the Punans are famous as hunters and trappers, they returned in a few hours without any result. Next morning when I ventured to begin taking their measurements they became uneasy and one after another slipped away, even leaving behind part of their promised rewards, rice and clothing for the women, and taking with them only tobacco and a large tin of salt, which I rather regretted, as they had well earned it all.

We made a trip of a few days' duration to the next elevation, Gunong Rega, in a northerly direction, most of the time following a long, winding ridge on a well−defined Punan trail. The hill−top is nearly 800 metres above sea−level (2,622 feet), by boiling thermometer, and the many tree−ferns and small palm−trees add greatly to its charm and beauty.

Toward the end of February I made my way back to the river. From our last camp, one day's march downward, three of my strongest Kayans had carried 45 kilograms each. My Javanese cook, Wong Su, on arriving in camp, felt ill and I found him lying prostrate. He had not been perspiring on the march down the hills and complained of chilly sensations. He also presented the symptoms of a cold attack of malaria, but it was simply the effects produced by the bites of leeches, to which he was particularly susceptible. He had seven bites on one ankle and two on the other, and the resulting wounds were swollen and suppurating, but by the application of iodine followed by hot compress bandages, he was able to resume his work in three days. Nevertheless, suppuration formed even at a distance from the wounds, and five months later they were not entirely healed. It is bad policy to remove leeches forcibly in spite of the temptation to do so. The application of salt or tobacco juice makes them drop off, and the wounds are less severe, but few persons have the patience to wait after discovering a leech. The animal is not easily killed. The Dayaks always remove it with the sword edge and immediately cut it in two.

On our return to our old lodging−house near Kaburau I spent a week making ethnological collections from the Kayan, who brought me a surprising number, keeping me busy from early until late. Before continuing my journey up the river I decided to go down to Tandjong Selor in order to buy necessary provisions and safely dispose of my collections. The Kayans were glad to provide prahus, the keelless boats which are used by both Dayak and Malay. The prahu, even the largest size, is formed from a dugout, and to the edge on either side are lashed two boards, one above and overlapping the other. This is accomplished by threading rattan through numerous small holes. As these are not completely filled by the rattan, they are plugged with fibre and calked with damar to prevent leakage.

In order to travel more comfortably we lashed a prahu at either side of mine, while many of the natives who took advantage of the occasion to visit the shops in town, tied theirs at the rear of ours. It was a gay flotilla that proceeded down the river, the Dayaks singing most of the time, especially the women who accompanied their husbands, a number of them sitting in my large but crowded prahu. The women never seemed to grow tired of the Mae Lu Long, a jolly song which I had several times heard them singing when returning from the fields in the evening. Its words are of a language called Bungkok. The Kenyahs have the same song, and when I sang it to the Penihings on the Upper Mahakam they also understood it. These Kayans (Segai) are able to sing in the following six dialects or languages: Bungkok, Tekena, Siudalong, Siupanvei, Lepoi, and Lui Lui.

[Musical notation: KAYAN WOMEN'S SONG (On returning from the fields) Lively. Mae lun long son dong min ma—i min kam lam (*Repeat*)]

At times as they paddled along, the men would sing without words, but more impressively, a song which until recently was used when the Kayan returned to a kampong from a successful head−hunting expedition. Though the Dutch authorities evidently have stamped out headhunting on the Kayan River, and have even destroyed the heads that were hanging in the houses, smashing them throwing them into the river, the Kayan still speaks of the custom in the present tense. Even one or two of my companions were credited with having taken part in such expeditions.

To−day the young men sing the song of the returning head−hunters more for the fun of it, but the enthusiasm of all waxed high when the paddlers took it up. Those who did not paddle would reach out for the large trumpets which, as part of my collections, were lying in my prahu, and blow them with full force as an accompaniment, just as these instruments formerly were used on real occasions. A deep, strong bass sound is produced which resembles the distant whistle of a big ocean steamer. The men at the rear would join in with wild shouts like those

made by American cowboys, most of them rising in their prahus to be able to give more impetus to the paddles. The powerful strokes of our enthusiastic crew made my prahu jump with jerky movements, and we progressed rapidly, arriving early in the afternoon at Tandjong Selor. This time I was made comfortable in a government's pasang−grahan that had just been completed, and which was far enough from the main street to avoid disturbing noise.

[Musical notation: KAYAN HEAD−HUNTERS' SONG (On returning from a successful raid) Vae vae−ae vo vae vo ae vo ae−ae−ae−ae vo vae (*Repeat*)]

I had found the Kayans very agreeable to deal with, and later had the same experience with many other tribes of Borneo. They ask high prices for their goods, but are not bold in manner. Though I made no special effort to ingratiate myself with them they always crowded round me, and sometimes I was compelled to deny myself to all callers regardless of their wishes. When I was reading or writing it was necessary to tell them to be quiet, also to stop their singing at night when my sleep was too much disturbed, but they were never offended. Presents of fruit, fish, mouse−traps, and other articles which they thought I might like, were constantly offered me. The women, free and easy in their manners, were ladylike to a surprising degree. In spite of having had ten teeth of the upper jaw filed down and the remainder coloured black by the constant chewing of betel, they are literally to the manner born.

The controleur told me that his large district, the northernmost part of Dutch Borneo, called Bulungan, comprised “about 1,100 square miles.” He estimated the number of inhabitants to be about 60,000, roughly speaking, 50 to each mile, but the population here as elsewhere follows the rivers. The Dayaks are greatly in majority, the Malays inhabiting the Sultan's kampong and a couple of small settlements in the vicinity. He had travelled a good deal himself and taken census where it was possible. His statistics showed that among the Dayaks the men outnumber the women somewhat, and that children are few. In one small kampong there were no children. The same fact has been noted in other parts of Borneo. The hard labour of the women has been advanced as a reason. Doctor A.W. Nieuwenhuis believes that inborn syphilis is the cause of the infertility of the Bahu on the Upper Mahakam. Whatever the reason, as a matter of fact the Dayak women are not fertile. The chief of the Kayan kampong, Kaburau, at the time of my visit had a fourth wife on probation for two years, having previously dismissed three because they bore him no children.

With the Malays the condition is just the reverse. Their total number in the Bulungan district is perhaps only one−tenth that of Dayaks, but with them women preponderate and there are many children. Such is the case in the rest of Dutch Borneo, and is one reason why the Malays ultimately must dominate.

The Sultan had for weeks been preparing to celebrate the marriage of his younger brother, which event occurred before I left, and the festivities were to continue for ten days. As a feature of the occasion, two young Malay girls presented a dance which they evidently had not practised sufficiently. Among the company was an old Malay who, according to the testimony of all present, was one hundred and thirty years old. He had lived to see seven sultans and was the ancestor of five generations. His movements were somewhat stiff, but otherwise he was a young−looking old man who, still erect, carried a long stick which he put down with some force at each step. I photographed the Sultan, who donned his official European suit, in which he evidently felt exceedingly uncomfortable. The operation finished, he lifted up the skirts of the long black robe as if to cool himself, and walked hurriedly away toward the house.

CHAPTER VI

RESUMPTION OF MY JOURNEY UP THE KAYAN RIVER—LONG PANGIAN—BERI−BERI— HINTS ON PROPER PROVISIONS—KENYAHS FROM CENTRAL BORNEO—EFFECT OF A SPIDER'S BITE

Shortly after my arrival in Tandjong Selor, fifty Dayaks, mostly Kenyahs, Oma Bakkah, and some Kayans, arrived from distant Apo Kayan on a trading expedition, and I considered this rather fortunate, as it would largely solve the difficult question of prahus and men for my journey up the river. The controleur and the Sultan also co−operated in assisting me to make a start, but when at last all seemed in readiness, the Malays allowed one of our prahus to drift away down toward the sea; after other similar delays I finally began my expedition up the Kayan River.

At the old pasang−grahan near Kaburau, I found that during our two weeks' absence surprising changes had taken place in the vegetation of the immediate surroundings. The narrow path leading from the river up the embankment was now closed by large plants in flower, one species looking like a kind of iris. The grass which we had left completely cut down had grown over twenty centimeters. (Three weeks later it was in bloom.) It was the month of March and several big trees in the surrounding jungle were covered with masses of white blossoms.

It is about 112 kilometres from Tandiong Selor to Long Pangian, our first halting−place, and, as the current of the river is not strong until the last day, the distance may be covered in four days. When low the Kayan River is light greenish−brown, but when high the colour changes to a muddy red−brown with a tinge of yellow. We used the dilapidated pasang−grahans as shelters, but one night we were obliged to camp on the river bank, so I had the tall, coarse grass cut down on the embankment, which was a few metres higher than the beach. Underneath the tall growth was another kind of grass, growing low and tangled like a mat, which could be disposed of by placing poles under it, lifting it and rolling it back, while at the same time the few roots attaching it to the ground were cut with swords. In less than fifteen minutes I had a safe place for my tent.

The Dayaks, however, who have little to concern them except their prahus, in which is left whatever baggage they may have, as usual slept in the prahus or on the stony beach. During the night the river rose a metre, and some of the men awoke in water. The Chinese mandur, notwithstanding my warnings, had tied his prahu carelessly, and in the middle of the night it drifted off, with lighted lamp and two Dayaks sleeping in it. Luckily some of the others soon discovered the accident and a rescuing party brought it back early in the morning. The “kitchen” had been moved up to my place, and in spite of rain and swollen river we all managed to get breakfast. I had a call from the chief of the near−by kampong, who spoke excellent Malay, and had visited New Guinea twice on Dutch expeditions, once with Doctor Lorenz. One characteristic of the climate which had impressed him much was the snow, which had been very cold for the feet. He was kind enough to send me a present of a young fowl, which was very acceptable.

Long Pangian is a small settlement where ten native soldiers are kept, under the command of a so−called posthouder, in this case a civilized Dayak from the South, who met us at the landing in an immaculate white suit and new tan shoes. It was warmer here toward the end of March than at Tandjong Selor, because there had not been much rain for a month. The soil was therefore hard, and in the middle of the day so heated that after a shower it remained as dry as before. A few Chinamen and Bugis who live here advance rice and dried fish to the Malays to provision expeditions into the utan which last two to three months, receiving in return rubber and damar. The Malays come from lower down on the river, and a good many of them leave their bones in the jungle, dying from beri−beri; others ill with the same disease are barely able to return to Long Pangian, but in three weeks those who do return usually recover sufficiently to walk about again by adopting a diet of katsjang idju, the famous green peas of the East Indies, which counteract the disease. The Malays mix native vegetables with them and thus make a kind of stew.

The rice traded in Borneo is of the ordinary polished variety, almost exclusively from Rangoon, and it is generally supposed that the polishing of the rice is the cause of this illness. The Dutch army in the East seems to have obtained good results by providing the so−called silver−fleeced rice to the soldiers. However, I was told that, in some localities at least, the order had to be rescinded, because the soldiers objected so strongly to that kind of rice. Later, on this same river, I personally experienced a swelling of the ankles, with an acceleration of the heart

action, which, on my return to Java, was pronounced by a medical authority to be beri−beri. Without taking any medicine, but simply by the changed habits of life, with a variety of good food, the symptoms soon disappeared.

It is undoubtedly true that the use of polished rice is a cause of beri−beri, because the Dayaks, with their primitive methods of husking, never suffer from this disease, although rice is their staple food. Only on occasions when members of these tribes take part in expeditions to New Guinea, or are confined in prisons, and eat the rice offered of civilization, are they afflicted with this malady. In my own case I am inclined to think that my indisposition at the commencement of my travels in Borneo was largely due to the use of oatmeal from which the husks had been removed. Rolled oats is the proper food.

Modern research has established beyond doubt, that the outer layers of grains contain mineral salts and vitamines that are indispensable to human life. Facts prove that man, if confined to an exclusive diet of white bread, ultimately dies from malnutrition. Cereals which have been “refined” of their husks present a highly starchy food, and unless they are properly balanced by base−forming substances, trouble is sure to follow. Scurvy, beri−beri, and acidosis have been fatal to many expeditions, though these diseases no doubt can be avoided by a judicious selection of provisions that insure acid and base forming nutrition in the right proportion. [*]

[Footnote *: For an illuminating example of poorly balanced food, see *Physical Culture Magazine*, New York, for August, 1918, in which Mr. Alfred W. McCann describes the disaster to the Madeira−Mamore Railway Company in Brazil, when “four thousand men were literally starved to death on a white bread diet.” In the July number may be found the same food expert's interesting manner of curing the crew of the German raider *Kronprinz Wilhelm*, which in April, 1915, put in at Newport News, in Virginia, with over a hundred men seriously stricken with acidosis. The crew had enjoyed an abundance of food from the ships they had raided and destroyed, but a mysterious disease, pronounced to be beri−beri, was crippling the crew. As the patients failed to respond to the usual treatment, the ship's chief surgeon consented to try the alkaline treatment which Mr. McCann suggested to him. The patients rapidly recovered on a diet consisting of fresh vegetable soup, potato−skin liquor, wheat bran, whole−wheat bread, egg yolks, whole milk, orange juice, and apples. No drugs were administered.

It may be added that Dr. Alfred Berg (in the same magazine, September, 1919) recounts the cure of an absolutely hopeless case of stomach trouble by the vegetable juice prepared according to McCann's formula. He has found the results gained by the use of this soup in diet “so remarkable as to be almost unbelievable.”

The formula in question, as taken from McCann's article, is: “Boil cabbage, carrots, parsnips, spinich, onions, turnips together for two hours. Drain off liquor. Discard residue. Feed liquor as soup in generous quantities with unbuttered whole−wheat bread.”]

As a precautionary measure during my further travels in Borneo I adopted the green peas of the Orient in my daily diet, and when properly cooked they suit my taste very well. Every day my native cook made a pot of katjang idju, to which I added as a flavour Liebig's extract, and when procurable different kinds of fresh vegetables such as the natives use. Almost any kind of preserved vegetables or meat, especially sausages, is compatible with this stew, which is capable of infinite variations. For a year and a half I used it every day, usually twice a day, without becoming tired of it, and this regimen undoubtedly was the reason why the symptoms of acidosis never reappeared.

I may add that besides this dish my main food was milk and biscuits, especially those made of whole wheat. In the tropics no milk will keep beyond a certain time limit unless it is sweetened, which renders it less wholesome. I found Nestle &Company's evaporated milk serviceable, but their sterilised natural milk is really excellent, though it is expensive on an expedition which at times has to depend on carriers, and in mountainous regions like New Guinea it would be impracticable to carry it. Under these conditions one is content to have the evaporated or the sweetened brand. Sterilised milk, although perhaps a luxury, is a permissible one when travelling by boat, but the fact that it remains sound only a limited time should be borne in mind. However, it helped me to resist the adverse conditions of travel in the equatorial regions, and to return to civilisation in prime physical condition. When I had opportunity I ate the rice of the Dayaks, which is not so well sifted of its husks, and is by far more palatable than the ordinary polished rice. I found the best biscuits to be Huntley and Palmer's College Brown, unsweetened.

As regards one's native companions, the Dayaks or Malays are quite satisfied as long as they get their full rations of rice and dried fish. This is the food they have always been accustomed to and their demands do not go further, although cocoanut−oil for frying the fish adds to their contentment. Katjang idju was usually given them

if there was sugar enough to serve with it; they do not care for it unsweetened. I have dwelt at some length on the food question, because information on this subject may prove useful in case others are tempted to undertake journeys of exploration and research in the East Indies. To have the right kind of provisions is as important in the equatorial regions as in the arctic, and civilised humanity would be better off if there were a more general recognition of the fact that suitable food is the best medicine.

Our Dayaks from Apo Kayan, who had proved very satisfactory, left us at Long Pangian. They had to wait several days before their friends caught up with them, so they could continue their long journey. This party of Dayaks, after spending one month at home in gathering rubber, had travelled in five prahus, covered some distance on land by walking over the watershed, and then made five new prahus in which they had navigated the long distance to Tandjong Selor. Ten men had been able to make one prahu in four days, and these were solid good boats, not made of bark. Already these people had been three months on the road, and from here to their homes they estimated that at least one month would intervene, probably more.

The rubber which they had brought was sold for f. 2,500 to Hong Seng. They had also sold three rhinoceros horns, as well as stones from the gall−bladder and intestines of monkeys and the big porcupine, all valuable in the Chinese pharmacopoea. Each kilogram of rhino horn may fetch f. 140. These articles are dispensed for medical effect by scraping off a little, which is taken internally with water. On their return trip the Dayaks bring salt from the government's monopoly, gaudy cloths for the women, beads, ivory rings for bracelets and armlets, and also rice for the journey. Should the supply of rice become exhausted they eat native herbs.

At Long Pangian we were able to develop plates effectively by hauling clear and comparatively cool water from a spring fifteen or twenty minutes away. By allowing six cans (five−gallon oil tins) of water to stand over night, and developing from 4.30 next morning, we got very good results, though the water would show nearly 76 F. My kinematograph was out of order, and desiring to use it on my journey higher up the river, I decided to go again to Tandjong Selor in an endeavour to have it repaired. The delay was somewhat irritating, but as the trip down−stream consumed only two days, I started off in a small, swift boat kindly loaned to me by the posthouder. Fortunately Mr. J.A. Uljee, a Dutch engineer who was in town, possessed considerable mechanical talent: in a few days he succeeded in mending the apparatus temporarily.

As I was preparing to return, another party arrived from Apo Kayan. They were all Kenyahs, Oma Bakkah, who came in seven prahus, and proved so interesting that I postponed my journey one day. The government has put up a kind of lodging−house for visiting Dayaks, and the many fine implements and utensils which these men had brought with them made the interior look like a museum. Their beautiful carrying−baskets and other articles were standing in a continuous row around the walls. These Kenyahs did not seem to have been here before and were agreeable people with whom to deal. I have not, before nor since, seen such a tempting collection of the short sword of the Dayak which has grown to be almost a part of himself. In the northeast these famous swords are called mandau, but the designation parang is more extensively used, and I shall employ that name. One exceedingly fine one, belonging to the chief, I purchased for three sets of ivory rings, each set at fifteen florins, and one sarong. In the blacksmith's art the Dayaks have reached a higher level than the otherwise more advanced Malays and Javanese. There were three women in the party. One of the men was dressed as a woman and his hands were tatued. Though his voice was quite manly, there was something feminine about him and in appearance he was less robust than the others. According to my Chinese interpreter, who has travelled much, there are many such men in Apo Kayan.

I stopped over night at one of the Bugis settlements which have large pineapple plantations. Such delicious pineapples as those in northern Borneo, with an unusual abundance of juice and very slightly acid, I had never before tasted. A gigantic white rat, about the size of a rabbit, which had been caught working havoc with the pineapples, was offered me for sale alive. I afterward regretted that, owing to the great difficulty of transportation, I declined, as no doubt it was a rare, if not a new, species.

In the evening, on my return to Long Pangian, I went to bed in the old pasang−grahan which I occupied there. It consisted of a single large room and had an air of security, so for once I omitted to tuck the mosquito−net underneath me. But this was a mistake, for some animal bit me, and I was awakened by an intense pain on the left side of my head which became almost unbearable, then gradually subsided, and in two hours I slept again. I applied nothing to the affected area because of the impossibility of locating the bite. On the left side of my neck at the back soon developed two balls of moderate size which had not quite disappeared four years afterward. Next

day I found a large dark−coloured spider which no doubt was the culprit. When chased it made long high jumps on the floor, but was finally captured. After that occurrence I paid strict attention to the mosquito−net, and when properly settled in my bed for the night I felt as safe against snakes or harmful smaller animals as if I were in a hotel in Europe.

CHAPTER VII

ON THE ISAU RIVER—A KENYAH CHILD'S FUNERAL—A GREAT FISHING EXPEDITION—CATCHING FISH BY POISONING THE RIVER—TAKING OMENS—ENTERTAINING SCENES

A report came to me that the people of kampong Long Isau (Long = sound; Isau = a kind of fruit) were making preparations to catch fish by poisoning the river, and that they were going immediately to build traps in which the stupefied fish are caught. I decided to go at once, and a few hours later we were on our way up the Isau River, a tributary to the Kayan, at the junction with which lies Long Pangian. We made our camp just opposite the kampong, which has a charming location along a quiet pool formed by the river at this point. The natives here and on the Kayan river above Long Pangian are Kenyahs. Our presence did not seem to disturb them in the least, nor did the arrival of some Malays from Long Pangian, who had closed their little shops in order to take part in the fishing.

The chief was a tall, fine−looking man, the personification of physical strength combined with a dignified bearing. He readily granted permission to photograph the women coming down to the river to fetch water. The Kenyah women wear scantier attire than those of any other tribes of Borneo—simply a diminutive piece of cloth. It was picturesque to see these children of nature descend the steps of the rough ladder that leads down to the river, gracefully carrying on their backs a load of five or six bamboos, then wade into the calm water, where they bathed for a few moments before filling their receptacles. The Kenyah drinks water by taking it up in his hands while looking at it. In the house he drinks from the bamboo utensils which are always conveniently placed. The Malay throws water quickly into his mouth with his right hand.

There seemed to be an epidemic of cholerine among the children, three having already died and one succumbed while we were at the kampong. The sounding of a gong drew attention to this fact and people assembled at the house of mourning where they wailed for an hour. The fishing was postponed one day on account of the burial, and the work of making the coffin could be heard over on our side of the river. During the night there was much crying.

Next day at noon the funeral took place. First, with quick steps, came two men and two women, parents of children who had died before, followed by the father of the dead child and another man of the family who carried the coffin. The procession embarked in three prahus. The relatives were all attired in simple but becoming mourning garments, made from wood−fibre, consisting of tunics, and wrappers around the loins, which as regards the women covered practically the whole body, and on their heads they wore pointed hats of the same material. In the first prahu the little coffin was placed, and immediately behind it the mother lay with face down. Over her breast was a broad band of fibre which passed around to the back where it was tied in a large bow. The mourning garb worn in this and other Dayak tribes by relatives of a deceased person is an attempt to elude the evil spirit (antoh) who is regarded as the cause of death and whose wrath the remaining relatives are anxious to evade by disguising themselves in this way. The men poled fast, and ten minutes later the cortege ascended the bank without following a path, and deposited the coffin in a small, old−looking house. Once daily for three days food is deposited near a dead child, while in the case of adults it is given for a long time.

The following day we all started up the river for the great catch. About 300 Dayaks had gathered, with 80 prahus. There were people from as far east as Kaburau, but those of the kampongs west of Long Pangian did not appear as expected. Some of the men carried spears specially devised for fishing, and some had brought their shields. We passed seven traps, in Kenyah called “bring,” some in course of making, and others already finished. These rapidly made structures were found at different points on the river. Each consisted of a fence of slightly leaning poles, sometimes fortified with mats, running across the river and interrupted in the middle by a well−constructed trough, the bottom of which was made from poles put closely together, which allowed the water to escape but left the fish dry.

The poison which stupefies or even kills the fish, without making it unfit for food, is secured from the root of a plant called tuba and described to me as being a vine. The root, which is very long, had been cut up into short pieces and made into about 1,800 small bundles, each kampong contributing its share. The packages had been formed into a beautifully arranged pile, in accordance with the artistic propensities of both Kenyah and Kayan,

whose wood−stacks inside the rooms are models of neatness. The heap in this case was two and a half metres long and a metre high, a surprisingly small amount for the poisoning of a whole river.

Before daylight they began to beat these light−brown tuba pieces until the bark became detached. The bark is the only part used, and this was beaten on two previously prepared blocks, each consisting of two logs lashed together, with flattened upper sides. On either side of these crude tables stood as many men as could find room, beating earnestly with sticks upon the bark, singing head−hunting songs the while with much fervour. Occasionally they interrupted the procedure to run about animatedly, returning shortly to resume their labour.

Later an augury was to be taken, and all gathered closely on a wide pebbly beach. First a long piece of root, which is called the “mother of tuba,” was beaten vigorously by a number of men. Then one of the principal actors stepped forward and began to make fire in the old−fashioned way, *i.e.*, by pulling with both hands a piece of rattan around a bamboo stick held to the ground. According to several possibilities the divinations are expounded: Should the rattan break before smoke ensues, the undertaking is postponed for an hour or two; if the rattan breaks into two equal parts, fish will not be caught; but if the right−hand piece is longer than the left, all is well and much fish will be the result.

The assemblage was chewing betel, smoking tobacco, and with hopeful patience anticipating a successful outcome, while one chief after another vainly attempted the augury. Only men who have taken heads are permitted to make divinations of fire at the tuba−fishing, and if all the elders have tried and failed the fishing is delayed one day.

The same augury is used when dogs have run away. If the left−hand piece is the longer, the dog is dead; if of the same size, the dog will be found at a distant future time; but if the right is the longer, the animal will be recovered very soon. The reading of pig's liver in regard to the present or the future is used more by the Kayan than by the Kenyah.

It was after nine o'clock in the morning when success was attained, and the fishers all suddenly dispersed. Some of them carried beaten bark into four empty prahus, threw water over it with their hands, then beat it again, until finally it was crushed to shreds. The prahus were then turned over and the stuff emptied into the water, where it soon disappeared. The bark on the blocks, which by this time had the appearance of a reddish−brown fibre, was now thrown into the river with much shouting and running about, whereupon the men ran out of sight, probably to take to their prahus.

The majority of the stupefied fish are caught in the so−called “bring,” the traps running across the river, but frantic endeavours were made by those engaged in the sport to take the fish before the fences were reached, and for this purpose hand nets or spears were used. This part of the proceeding was most entertaining.

The fleet of prahus thoroughly searched the water, descending the river slowly in seven hours. At a few places where the stream makes large pools a few hundred metres long the boats loitered for a considerable time, as the prey would not often rise to the surface. Now and then there was much excitement over a fish that had risen and dived again, and the nearest prahus would all try to get it. Soon a man would be seen to jump after it with fixed spear, pass out of view, and after a while reappear on the surface, invariably with a large fish on the spear point. It was a magnificent exhibition of agility combined with skill.

The Malays also captured many victims with their casting−nets. It is customary for each to consider as his personal property all the fish he obtains. These gatherings afford much delight to the children, of whom a great number accompanied their elders in the prahus. Women and children were in holiday attire, and, in spite of the grotesque ornaments of big rings in the split, distended ear−lobes, the latter were unusually charming. They had bracelets of brass and silver around their wrists and ankles; some of them wore necklaces of antique beads in dull colors, yellow, dark brown, or deep blue. Such a necklace may cost over a thousand florins. The spirit of the whole occasion was like that of a great picnic.

All was over at five o'clock in the afternoon, when the people dispersed to their respective kampongs. At each of the seven “bring,” each belonging to one of the principal men, were caught from 100 to 200 fish, most of them fairly large. I noted seven species. More than a thousand have been caught, and for the next two nights and days the people were engaged in opening and drying fish over fire and smoke. Thus preserved they are of a dark−brown tint, very light in weight, and will keep for three months. Before the dried product is eaten it is pounded, then boiled, and with each mouthful a pinch of salt is taken.

During the night much fish was obtained even as far down the river as our kampong, and many men searched

for it here, using as lamps petroleum in bamboo with a piece of cloth for a wick. Next day all the able−bodied people left the kampong for a week's stay at the ladangs (fields), one day's journey up the Kayan River, only the weak and old people remaining behind. On this occasion I observed five or six individuals, men and women, of a markedly light, yellowish colour. One woman's body was as light as that of a white woman, but her face was of the usual colour, perhaps somewhat lighter.

CHAPTER VIII

THE JOURNEY CONTINUED UP THE KAYAN RIVER—FIRST EXPERIENCE OF KIHAMS, OR RAPIDS—WITH KENYAH BOATMEN—ADVANTAGE OF NATIVE COOKING—LONG PELABAN—THE ATTRACTIVE KENYAHS—SOCIAL STRATA—CUSTOMS AND HABITS—VALUABLE BEADS

At Long Pangian several days were spent in vain efforts to secure men and prahus to continue the journey up the Kayan River. The few Malays about, as usual, did not believe in work, but the posthouder finally succeeded in calling Kenyahs from the river above, and on the 1st of May we started with five prahus and twenty−four men. It was quite refreshing to hear again the joyous shouts of the paddlers, who worked eagerly and quickly against the strong current. A little over an hour brought us to some well−known rapids, or “kihams,” as they usually are called in Borneo. Formerly this Kiham Raja had a bad reputation, Dayaks being killed here occasionally every year, but of late the government has blasted out rocks and made it more passable. However, even now it is no trifle to negotiate these rapids. Below them we halted and threw explosive Favier into the water in the hope of getting fish, and as soon as the upheaval of the water began the Kenyahs, as if by a given signal, hurried all the prahus out to the scene. With other natives than Dayaks this would have given me some anxiety, as the boats were heavily laden and contained valuable cameras and instruments. We secured quite a number of fish and the Kenyahs had a good time.

The traveller soon assumes a feeling of confidence in these experienced men as, according to circumstances, they paddle, pole, or drag the prahu by a long piece of rattan tied to the inside of the bow. In passing these rapids most of them got out and dragged us by the rattan, but as the shore consisted of big stones that sometimes were inaccessible, they would often throw themselves with the rope into the foaming water and manage to get foothold a little further up. Sometimes it looked as if they would not succeed, the prahu receding precariously, but they were so quick in their movements and the prahus followed each other so closely that it was possible to give mutual help.

Amban Klesau, the only son of the chief of Long Mahan, directed my prahu. He had taken part in an expedition to New Guinea and was an efficient and pleasant man who had seen something of the world, but his attire was fantastic, consisting of a long white nightshirt with a thin red girdle around the waist, to which was attached his parang adorned with many ornaments. He liked that shirt, for he did not take it off all day, notwithstanding the extreme heat. The dry season had set in, and though in our travels I took good care to place mats over the iron boxes in which cameras and plates were kept, still they became warm. When I photographed, perspiration fell like rain−drops. At Long Mahan (mahan = difficulties, or time spent) we found the pasang−grahan occupied by travelling Malays, two of whom were ill from a disease resembling cholera, so we moved on to a ladang a little higher up, where we found a camping−site.

Next day we stopped to photograph a beautiful funeral house on the bank of the river, in which rest the remains of a dead chief and his wife. This operation finished, the Dayaks prepared their midday meal consisting of rice alone, which they had brought in wicker bottles. A number of bamboo sticks were procured, which were filled with rice and water and placed in a row against a horizontal pole and a fire was kindled underneath. As soon as this cooking was finished the bamboos were handed to the chief, Amban Klesau, who in the usual way split one open with his parang to get at the contents. Having eaten, he distributed the rest of the bamboos. I was given one, and upon breaking it open a delicious smell met my olfactory sense. The rice, having been cooked with little water, clung together in a gelatinous mass which had a fine sweet taste, entirely lacking when cooked in the white man's way.

During my travels in Borneo I often procured such rice from the Dayaks. It is a very clean and convenient way of carrying one's lunch, inside of a bamboo, the open end closed with a bunch of leaves. Fish and meat are prepared in the same manner. With fish no water is used, nevertheless, when cooked it yields much juice, with no suggestion of the usual mud−flavoured varieties of Borneo. It will remain wholesome three days, and whenever necessary the bamboo is heated at the bottom. One who has tasted meat or cereals cooked between hot stones in earth mounds knows that, as regards palatable cooking, there is something to learn from the savages. It is a fact

that Indians and Mexicans prepare green corn in a way superior to that employed by the best hotels in New York. There is no necessity of returning to the bamboo and hot stones as cooking utensils, but why not accept to a greater extent the underlying principle of these methods?

In the evening we arrived at Long Pelaban, a large Kenyah kampong, where for some time I made my headquarters. On the opposite bank of the river we cut the tall grass and jungle and made camp. Soon we were visited by many small boys who afterward came every day to look for tin cans. With few exceptions they were not prepossessing in appearance; nearly all were thin, and one was deaf and dumb, but they were inoffensive and well−behaved. During my travels among Dayaks I never saw boys or girls quarrel among themselves—in fact their customary behaviour is better than that of most white children. Both parents treat the child affectionately, the mother often kissing it.

The sumpitan (blow−pipe) is found in his room, but the Kenyah usually prefers to carry a spear when he goes hunting. In his almost daily trips to the ladang he also takes it along, because instinctively mindful of enemy attacks. The Kenyahs are physically superior to the Kayans and the other natives I met, and more free from skin disease. They are less reserved than the Kayans, who are a little heavy and slow. In none of these tribes is any distrust shown, and I never saw any one who appeared to be either angry or resentful. Though the so−called Dayaks have many traits in common, of them all the Kenyahs are the most attractive. They are intelligent and brave and do not break a contract; in fact, you can trust their word more completely than that of the majority of common white people. Neither men nor women are bashful or backward, but they are always busy, always on the move—to the ladang, into the jungle, building a house, etc. Murder by one of the same tribe is unknown and a lonely stranger is quite safe in the kampong, where they do not like to kill anybody.

Among the Kenyahs and Kayans and many other tribes are found distinct social strata, upper, middle, and low. The first class ranks as a sort of nobility and until recent times had slaves, who were kindly treated. The members of the second class have less property, but they are active in blacksmithing, making prahus, determining the seasons by astronomical observations, etc. These well−bred Dayaks are truthful and do not steal. In their conception a thief will have to carry around the stolen goods on his head or back in the next life, forever exposed to scorn and ridicule. Third−class people are descendants of slaves and, according to the posthouder at Long Pangian, himself a Dayak, they are the more numerous on the Kayan River. These may tell lies, and ten per cent of them are apt to appropriate small articles, but they never steal money.

The Kenyah woman is most independent, and may travel unaccompanied by another woman with a party of men for days, sleeping aside, separate from the men. She and her husband both bring wood to the house and she does the cooking. No man has ever been known to beat or kill his wife. If dissatisfied, either may leave the other. The daughter of the chief at Long Mahan had had three husbands. Abortive plants are used, but the men do not know what they are.

Every day I went to the kampong, and it was a pleasure to visit these still primitive natives. Women, as usual, were timid about being photographed, for it is a universal belief that such an operation prevents women from bearing children. However, by giving money, cloth, sugar, or the like, which would enable them to offer some little sacrifice to protecting spirits, I usually succeeded. But if a woman is pregnant or has care of a small child, no inducements are of any avail, as an exposure to the camera would give the child bad luck or a disease that might kill it.

The women here had the teeth of the upper jaw in front filed off, but not the men, who make plugs from yellow metal wire, procured in Tandjong Selor, with which they adorn their front teeth, drilling holes in them for the purpose. The plug is made with a round flat head, which is the ornamental part of it, and without apparent rule appears in one, two, or three incisors, usually in the upper jaw, sometimes in both. One of my men took his out to show to me.

The women are cleanly, combing their hair frequently and bathing three times daily. The men bathe even oftener; still all of them have more or less parasites in their hair and frequently apply lime juice in order to kill them. A young woman, whom I remembered as one of two who had danced for the kinematograph, had considerable charm of manner and personal attraction; it was a trifle disconcerting to find my belle a little later hunting the fauna of her lover's head. Her nimble fingers were deftly expert in the work and her beloved was visibly elated over the demonstration of her affection.

These natives do not tolerate hair on the body and pull it out or shave it off. The men even remove the hair at

the edge of the scalp all around the head, letting the remainder attain a growth of about sixty centimetres, and this is tucked up in a coil under the cap. The hair of eyebrows and eyelids is removed with great care. The women perform this operation, and tweezers made for the purpose are usually seen among the ornaments that hang from the tops of their hats. I was told that people careful about their appearance have their eyes treated in this manner every ten or even every five days. It is a service which a young man's “best girl” is glad to perform and a couple thus engaged may often be seen. Truly the wiles of Cupid are many.

The Dayaks are fond of ornaments and the Kenyahs are no exception. The extraordinary number of large tin or brass rings worn in the vastly distended ear−lobe is well known and is the striking feature in the appearance of most tribes. I was told that among the Kenyahs the ear−lobes of children are pierced when the infant is seven days old. Especially the women of this and many other tribes carry this fashion to extremes, the lobe being so elongated that it may be twisted twice around the ear. The heavy weight of rings sometimes breaks the thin band to which the lobe has been stretched. The men may also wear rings, though they remove them when going into the utan or to the ladang, and, although in this regard the males make less display than the females, in the wearing of valuable necklaces they excel them.

Necklaces of beads are worn by men, women, and children. When money is obtained by selling rubber to the Chinese, or by taking part in an expedition to New Guinea, there is much display of such ornaments, many of which are manufactured in Europe. But the Dayaks are extremely particular about the kind they buy; therefore it is useless to take beads out to Borneo without knowing the prevalent fashion. On the Kayan River a favoured style of bead is tubular in form, light yellow in hue, and procured from Bugis traders who are said to obtain their stock in New Guinea. Others of similar shape, but brown in colour, come from Sumatra.

When children are small they are carried on the backs of their mothers in a kind of cradle, the outside of which is often elaborately adorned with beads. The chief in Long Pelaban had one, the value of which I computed to be two thousand florins. The choicest beads are very old and have been kept for centuries in Borneo. Some are thought to be of Venetian origin, while others resemble a Roman variety. It is very difficult to induce the Dayaks to sell any of these, which they guard as precious heirlooms and the value of which they fully realize. According to Hose and McDougall, the wife of a rich chief in Sarawak may possess old beads to the value of thousands of pounds.

CHAPTER IX

HYDROPHOBIA—FUNERAL CEREMONIES—AT A PADDI HARVEST—ANOTHER TUBA−FISHING EXPEDITION—THE CHARM OF PRIMITIVE MAN—INTERESTING CEREMONIES—ON HEAD−HUNTING GROUND

Hydrophobia was raging at Long Pelaban, and during my stay one man and seven children were bitten. For religious reasons the Dayaks do not like to kill dogs, so in cases like this the canines that are ill are caught, their legs are tied together, and they are thrown into the water to die without being killed. Over forty were disposed of in this way. I saw one of the hydrophobia victims standing in the water as if alive, a little of the back showing above the surface.

The sounding of a gong one day signified the death of a woman. A party immediately went out to procure a suitable tree from which to make the coffin. Throughout the night we could hear without intermission the sounds produced by those who hollowed out the log and smoothed the exterior. Next day I was present at the obsequies of the dead woman. On the large gallery men were sitting in two long rows facing each other, smoking their green−hued native tobacco in huge cigarettes, the wrappers of which are supplied by large leaves from two species of trees. A jar of native brandy stood between them, of which but little was consumed. More alcohol is made here from sugar−cane than from rice. The latter is the better and sweeter, the former being sour.

At the end of the gallery stood the large, newly made casket, which was open, the corpse covered with cloth resting inside. It was an oblong, heavy box supposed to represent a rhinoceros, though nothing positively indicated this except the large head of this animal at one end, which, though rudely made, was cut with considerable artistic skill. The family sat around the casket, one man smoking tobacco, the women wailing and occasionally lifting the cover to look at the face of the corpse. One babi (pig) that had belonged to the deceased had been killed and was served with rice. In the afternoon, having partaken of food, a number of men carried the heavy burden on their shoulders down to the river, preceded by two women belonging to the family. It was placed on two prahus, which were lashed together, and then taken down the river to be buried. After the death of a relative women mourners cut off about two centimetres from the end of the hair; the men cut an equal portion from the front.

Later in the afternoon the gong announced another death, that of a child. On this account some sixty Malays who were camped here, bound for the utan higher up the river, in search of rubber and damar, delayed their departure as did some Kenyahs who were on their way to Apo Kayan, and the people of the kampong did not go to their ladangs. The following day the sound of the gong was again heard, but this time it was occasioned by the fact that an adept had taken augurs from the flight of the red hawk, and to him it was given that illness would cease.

It was difficult to hold the busy Dayaks in the kampong. At this time, the beginning of May, their attention was absorbed in harvesting the paddi. Every day they started up the river to their ladangs a few miles distant, returning in the evening with their crops. I decided to visit these fields, taking my cameras with me. In years gone by the kampong people have gradually cleared the jungle from a large tract of country, but part of this clearing was still covered by logs that had not been burned. Over these hundreds and hundreds of fallen trees, down steep little galleys and up again, a path led to the present fields higher up in the hills, very easy walking for bare feet, but difficult when they are encased in leather shoes. For over an hour and a half we balanced along the prostrate trunks, into some of which steps had been cut, but, arduous as was the ascent, we naturally found the descent in the evening a more hazardous undertaking; yet all emerged from the ordeal with sound limbs.

We arrived a little before noon and found some of the natives busy preparing their midday meal in and around a cool shed on top of a hill from where an extensive view was obtained of the past and present fields of the country. Near by was a watch−tower raised on top of upright logs. At one side of it four bamboos of different sizes were hanging horizontally over each other, which produced different notes when struck, and probably had been placed there for the purpose of frightening birds away.

The Kenyahs “take turns” helping each other to harvest, and on this occasion they were assisting their chief. It was a scene of much animation, as if it were a festival, which in reality the harvesting is to them. The long row of

men and women in their best garments, with picturesque sun−shades, cut the spikes one by one, as the custom is, with small knives held in the hollow of their hands. Assuredly the food which they received was tempting to hungry souls. The rice, after being cooked, was wrapped in banana leaves, one parcel for each, forty−four in all, and as many more containing dried fish which also had been boiled. The people kindly acceded to my request to have them photographed. They then packed the harvested paddi in big baskets, which they carried on their backs to the storehouse in the kampong the same afternoon. From planting time till the end of the harvest—four or five months—a man is deputed to remain in the kampong to whom fish is forbidden, but who may eat all the rice he wants, with some salt, and as recompense for his services receives a new prahu or clothing.

A few days later, the chief having early in the morning taken omens from a small bird, the inhabitants with few exceptions departed on a tuba−fishing expedition to the Pipa, a small tributary to the Kayan River farther north. The two kampongs, Long Pelaban and Long Mahan, combined forces, and as so many were going I experienced difficulty in arranging to join the excursion, but finally succeeded in securing prahus and men from the latter place.

We passed a small settlement of Punans, former nomads, who had adopted the Dayak mode of living, having learned to cultivate rice and to make prahus. We found the people of Long Pelaban camped on a stony beach in two long rows of rough shelters, each row containing many families under one common roof of bark. The Long Mahan people had gone farther and camped on a similar beach, and between the two I discovered a pleasant location in the jungle by ascending the high bank of the river. Hardly had we finished putting up our tents when a violent thunder−storm arose, which continued unabated for half an hour, and thereafter with diminished force throughout the night. Many of the Dayaks moved up to our position, and next day the river ran high, so we did not make a start.

In the morning, after a fine bath, as I was about to take breakfast, a large party of visitors from Long Mahan approached. They were unacquainted with the Malay tongue and showed obvious signs of embarrassment, but by distributing a little candy to the children and biscuits to the adults harmony was soon established. Two unusually attractive small girls wearing valuable bead necklaces, who at first had appeared takut (frightened), unconcernedly seated themselves on their heels in front of me. The others perched in a long row on two poles which they laid on the wet ground, all of them preparing to watch me eat breakfast. Among other things the menu included half a dozen small boiled potatoes brought from Tandjong Selor and obtained from Central Java; they usually keep for four or five weeks and are a valuable aid in maintaining good health in the tropics.

The Kenyahs had never seen potatoes before, and one man handed some of the peelings to his wife for inspection, whereupon I gave her a potato, which she peeled carefully, divided, and gave a piece to each of the two children, with whom, however, it did not find favour. I opened a can of milk and another of cream, for I was fresh from Europe and had plenty of provisions. After helping myself from the cans I gave them to the children, who greatly relished what was left in them, but they did not eat greedily, behaving like white children who have not learned from adults to eat hastily. The Kenyahs are very courteous. When a man passed my tent opening he generally called aloud, as if announcing his presence.

In visiting the camps I found the Kenyahs, even on an occasion like the present, busily engaged at some occupation, and seldom or never was anybody seen sitting idle. The men were splitting rattan into fine strings, later to be used for many purposes: for plaiting the sheath of the parang; for making bottle−shaped receptacles for rice; for securing the axe to the handle, etc. Women were doing the same work with bamboo, first drying the stalks by standing them upright before a fire. These fine bamboo strings are later used in making winnowing trays and for various kinds of beautifully plaited work. When employed in this way, or on other occasions, the women smoke big cigarettes as nonchalantly as the men.

Continuing the journey next day, we found it a laborious undertaking over many small rapids. The water had already subsided, so we had to wade most of the day, dragging the prahus, a task which we found rather fatiguing, as the stones are difficult to step on in the water and very hot out of it. The river was narrow, but here and there widened out into pools. Many “bring” were erected over the stream, and I noticed that they were smaller than those I had seen before, but the arrangements for beating the tuba were far more elaborate.

On the river bank, as we approached the main camping−place, piles of the light−brown root were often seen, resembling stacks of wood. The gathering of these roots, I learned, was accomplished in one day. Our men had helped in the work and they also put up a couple of “bring" near our camp for our own use. Early in the afternoon

two rather solid structures, built like bridges across the small river, were erected; on these the beating of the tuba was to take place next morning. In the middle, lengthwise, was placed a long, narrow excavated log, longer than the bridge itself, for the use of the beaters.

In the evening a large tree crashed to earth not far from my camp, and at a later hour another, still nearer, thunderously broke with its fall the silence of night. At two o'clock in the morning the beating of tuba began, to the accompaniment of shouts and outcries, and though the noise was considerable and unusual I did not find it intolerable, but fell asleep again. I arose early, and after partaking of some excellent Dayak rice I walked down to view the proceedings, and found the scene engrossing. Men and women stood close together on each side of the long trough, crushing the tuba with sticks in a similar manner to that adopted when pounding rice. The trough had at one end a small compartment, open like the rest, but the sides had been smoothed with an axe and when beaten served the purpose of a gong. The bark was pounded into small pieces and then thrown to one side upon large palm leaves which covered the bridge.

Boarding a prahu, I next visited Amban Klesau's bridge, a little lower down, which was larger and more pretentious, with tall poles erected on it, and from the top hung ornamental wood shavings. The end of the trough here had actually been carved into a semblance of the head of “an animal which lives in the ground,” probably representing a supernatural being usually called nagah. The owner himself was beating it with a stick on both sides of the head, and this made more noise than the pounding of the fifty men and women who stood working at the trough. At times they walked in single file around it.

The pounding was finished in the forenoon, and all went a little farther down the river to take the fire omen at a place where the river widened out into a pool. A man with many tail−feathers from the rhinoceros hornbill (*buceros rhinoceros*) stuck into his rattan cap seated himself on a crude platform which had been built on upright poles over the water. Some long pieces of tuba−root were lying there, and he squatted on his heels facing the principal men who were sitting on the bank south of him.

A few minutes later the chief of Long Mahan made his way out to the platform over some logs which loosely bridged the space to the bank of the river, and attempted the fire−making, but after two unsuccessful attempts he retired. Several other prominent men came and tried, followed by the man with the tail−feathers in his cap, but he also failed; whereupon they all stepped ashore, taking the fire−making implements and some of the roots with them, in order to see whether they would have better luck on land. The brother of the chief now came forward and made two attempts, with no more success than the others. Urged to try again, he finally succeeded; the assemblage silently remained seated for a few minutes, when some men went forth and beat tuba with short sticks, then threw water upon it, and as a final procedure cast the bark into the river and again beat it. From the group of the most important people an old man then waded into the water and cast adrift burning wood shavings which floated down−stream.

In the meantime the Long Mahan people had gone to throw the bark into the river from their elaborate bridge, and those of Long Pelaban went to their establishments. The finely pounded bark soon began to float down the river from the bridges as it might were there a tannery in the neighbourhood. Presently white foam began to form in large sheets, in places twenty−five centimetres thick and looking much like snow, a peculiar sight between the dark walls of tropical jungle. Above the first little rapid, where the water was congested, a portion of the foam remained like snow−drift, while most of it continued to advance and spread itself over the first long pool. Here both men and women were busily engaged catching fish with hand−nets, some wading up to their necks, others constantly diving underneath and coming up covered with light foam.

The insignificant number of fish caught—nearly all of the same kind—was surprising and disappointing. Even small fish were eagerly sought. There was little animation, especially at the beginning of the sport, and no spears were used. Several tons of bark must have been utilized, at least eight or ten times as much as at the Isau River, and I regretted that they should have so little reward for their trouble. Five days were spent in travel, two days in making “bring” and gathering tuba, and they had pounded tuba for eight hours, since two o'clock in the morning. After all these exertions many prahus must have returned without fish. Possibly the fish had been practically exterminated by the tuba poisoning of former years. One man told me that many fish remain dead at the bottom, which partly accounts for the scanty result.

I was desirous of having Chonggat remain here for a week of collecting, but no Kenyah was willing to stay with him, all being deterred through fear of Punan head−hunters, who, on this river, not so long ago, had killed

some rubber−gatherers from Sarawak. Besides, they also anticipated revenge on the part of Kayans, eleven of whom had been killed by the Kenyahs in Apo Kayan one and a half years previously. According to their own reports and that of the Chinese interpreter, the heads of six men and five women had been taken after a successful attack on the two prahus in which the Kayans (Oma−Lakan) travelled. The Kenyahs (Oma−Kulit) who had committed the outrage had been apprehended by the Company, as the government is called by the natives. The brother of the chief of Long Pelaban, who was with us fishing, three months previously had returned from Samarinda, where he had spent one year in prison for having been implicated in a minor way in this crime, while the main offenders were serving labor terms of six years in Sorabaia, Java.

This report was confirmed by a Dutch officer whom I met a month later and who came from Apo Kayan. The attacking Kenyahs were eighty in number, of whom ten were punished. The affair took place in 1912 at a distance of six hours, going down−stream, from Long Nawang. Though head−hunters are known to travel wide and far, and distant Apo Kayan is not too remote for them, nevertheless to me, as well as to Chonggat, the risks seemed unfounded; however, there remained no alternative but for all of us to return to Long Pelaban.

CHAPTER X

IN FOG AND DARKNESS—A RAID BY ANTS—DEPARTURE FROM LONG PELABAN—AN EXCITING PASSAGE—RETURN TO TANDJONG SELOR

During April and the first half of May the weather was warm with very little rain, though at times thunder was heard at a distance. But during the second half of May thunder and lightning in the evening was the usual occurrence, with an occasional thunder−clap at close quarters. At night it rained continually though not heavily, but this was accompanied by a dense fog which did not clear away until nine o'clock in the morning. When the dark clouds gathered about sunset, it was not with exactly cheerful feelings that I anticipated the coming night. My tent stood at a little distance from the rest of the camp, for the reason that solitude at times has its charms. When the lamp outside the tent door was extinguished, and all was enveloped in darkness and fog to an overwhelming degree, a feeling of loneliness and desolation stole over me, though it soon left me when I thought of the glories of the coming day, when all the rain would be forgotten.

Shortly after sunset one evening scores of thousands of ants descended upon me while supper was in progress. In the dim light afforded by the lamp I had not perceived their approach until I felt them around my feet. Upon looking about, I discovered to my astonishment that the floor, which had a covering of closely set bamboo stalks, was black with ants and that regiments of them were busily climbing up my bed. Coming in such immense numbers and unannounced, their appearance was startling. Outside the soil seemed to move. Twice before I had received visits from these ants but had prevented their entering the tent by pouring hot water over them. The pain caused by their bite is severe, although of short duration, and they are therefore feared by the Dayaks and Malays.

By liberal application of hot water and burning paper on the ground we finally succeeded in driving the unwelcome visitors out of the tent; but new hordes were constantly arriving, and we battled for two hours before I could retire, carrying many bites as souvenirs. None were then in the tent and next day not a trace of them remained. The Chinese photographer had been there twenty minutes before the raid began and had not noticed even one ant. The attack began as suddenly as it ceased.

My stay on the Kayan River had been interesting as well as profitable. Twice during that period requests had come from the government for Dayaks willing to join a Dutch enterprise operating in northern New Guinea, and the chances of my securing sufficient men on this river for my expedition were evidently gone. However, with the assistance of the government I felt sure there would be no difficulty in securing them from other rivers of Dutch Borneo, but I deemed it wise to begin my return trip.

The river was now so swollen that it was difficult to effect a departure, and current report indicated that if the rain continued it might be necessary to wait a month before the rapids below could be passed. I had all my belongings packed in order to be ready to start whenever it was found advisable to do so. While waiting I went over to the kampong to kinematograph two dancing girls who the day before, owing to their bashfulness, had detained us so long that the light became inadequate. At last the river fell about a metre during the night, and the chief and his brother called on me early in the morning to suggest that our best plan would be to start in the middle of the day.

Only a couple of hours are consumed in going to Long Pangian from here, on account of the downward course of the river, which forms rapids and currents at frequent intervals. As the men appeared disinclined to go, the posthouder of Long Pangian, who then was with me, crossed the river and gave the necessary impetus to action. Soon a big prahu was hauled by many men down the bank to the river; this was followed by others, taken from their storage place under the house, and shortly afterward we had facilities for departure. Most of the boats were medium−sized; mine was the largest, about seven and a half metres long, but so unsteady that the luggage was loaded with difficulty. As usual my prahu carried the most valuable articles, the photographic outfit, scientific instruments, etc., all of which was finally secured by tying rattan over it from side to side. Naturally, fewer men are needed going down a river than coming up, and I had only four.

At two o'clock in the afternoon a start was made and we proceeded rapidly down−stream. The man standing at the bow is the commander, not the one that steers with his paddle at the stern, and it appeared to be their custom always to take the boat where the current was strongest and the water most turbulent. It seemed reckless, but my

prahu, heavily laden, acted admirably, shooting through the waves without much exertion. After nearly an hour of refreshing passage we approached the main rapid, Kiham Raja. I kept behind the rest of the fleet, in order, if possible, to get a snap−shot. In the beautiful light of the afternoon the prahus afforded a splendid sight as, at short intervals, they passed along one after another, the first ones already considerably lower than mine. My Kenyahs, all standing, seemed to know exactly where to go and what to do, and we moved along rapidly. Without a moment's hesitation we shot down the kiham. This time they did not choose the place where the waves ran highest, and we quickly slipped down the rapid, turbulent current, while the big waves on our right threatened to engulf our craft.

As usual, it was difficult to get away from Long Pangian, but the posthouder exerted himself to the utmost, and after a few days we were ready to leave for Tandjong Selor. To a large prahu that we had obtained we had to lash a log on either side to keep it steady. I found that the Kenyah prahus in these parts usually are unstable. One Dayak that had been loading mine in stepping ashore tipped it to such a degree that two large green waterproof bags containing clothing, blankets, etc., fell overboard. They floated well and were recovered.

Having finally put mats on upright saplings over the boats, as shade against the sun and protection against rain, we were off, but it was not altogether a pleasant two days' journey. My heavily laden prahu, having been out of use for some time, leaked badly, so one of the five men had all he could do to throw out the water which poured in through the holes of the rattan fastenings. The man who was bailing sat opposite me in the middle section, and for want of space I had to hold my feet up, with one leg resting on either side of the prahu. I wore a pair of London Alpine boots with thick soles and nails, weighing eight pounds, which I had found too heavy for walking, but which were excellent for wear in wet boats. When, in order to change my uncomfortable position, I placed both legs on one side, the edge of the prahu nearly touched the water and the Dayaks would cry out in warning. I have not on other rivers in Borneo met with prahus quite as cranky as these. At the Bugis settlement I bought fifty delicious pineapples at a very moderate price and distributed them among us.

CHAPTER XI

DEPARTURE FOR BANDJERMASIN—A PLEASANT STEAMSHIP LINE—TWO HEAD−HUNTERS—AN EXPEDITION TO LAKE SEMBULO—SAMPIT—THE ORANG−UTAN—STORMY WEATHER—A DISAGREEABLE RECEPTION

In Tandjong Selor I was exceedingly busy for three days getting boxes and packing the collections, and early in June I departed for Bandjermasin, on S.S. *De Weert*. It has been my fortune to travel much on the steamships of the Royal Packet Boat Company, which controls the whole Malay Archipelago from Singapore to New Guinea and the Moluccas. It is always a pleasure to board one of these steamers, as the officers are invariably courteous, and the food is as excellent on the smaller steamers as on the large ones. The same kind of genuine, good claret, at a reasonable price, is also found on all of them, and it may readily be understood how much I enjoyed a glass of cool Margaux−Medoc with dinner, after over five months in the utan. The sailors on these steamers are Javanese. Those from Madura, rather small men, made an especially good impression. A captain told me they never give any trouble except when on leave ashore in Sourabaia, where they occasionally remain overtime, but after a few days they come to the office and want to be taken on again. They are punished by having their wages deducted for the days they are absent, but the loss of coin does not trouble them much. If they have cigarettes and their meals they are happy, and they never accumulate money. They are engaged for one year and some of them renew their contracts.

As we sailed southward from the Kayan River we were told of a French count who with his wife lived on an island three or four kilometres long, near the coast. At first he had fisheries and sold dried fish, which, with rice, forms the staple food of the natives of Borneo and other countries of the East. He was enabled to change his business into cocoanut plantations, which to−day cover the island. According to report they dressed for dinner every day, to the end that they might not relinquish their hold upon the habits of civilised society. Later I learned that when the war broke out the count immediately went to France to offer his services.

Lieutenant C.J. La Riviere came aboard in Samarinda, en route to Holland for a rest, after being in charge of the garrison at distant Long Nawang in Apo Kayan. There are 40 soldiers, 2 officers, and 1 doctor at that place, which is 600 metres above sea, in a mountainous country with much rain, and therefore quite cool. In a single month they had had one and a half metres of rain. Officers have been known to spend three months in going from Long Iram to Apo Kayan, travelling by prahu almost the whole distance. Usually the trip may be made in a couple of months or less. The river at last becomes only four metres broad, with very steep sides, and in one night, when it rains copiously, the water may rise five to six metres. Mail usually arrives three times a year, but when the lieutenant boarded the steamer he had not seen a newspaper for five months.

He expressed his opinion that the government would find it extremely difficult to stamp out head−hunting in Apo Kayan, with its 15,000 Dayaks, because the custom is founded in their religious conception. “Our ancestors have always taken heads,” they say; “we also do it, and the spirits will then be satisfied. We have learned it from our ancestors, who want us to do it.” “They often ask us,” the lieutenant said: “When are you going to leave Long Nawang? When you are gone then we will again take up the head−hunting.” These same Kenyahs are entrusted to go to Long Iram to bring provisions to the garrison. About eighty of them are sent, accompanied by only two soldiers, and after three months' absence the goods arrive safely at Long Nawang.

On board the steamer were also two Punan head−hunters from the interior who were being taken to Bandjermasin under the guard of two soldiers. They had been caught through the assistance of other Punans, and in prison the elder one had contracted the dry form of beri−beri. He was a pitiful sight, in the last stage of a disease not usually found among his compatriots, no longer able to walk, looking pale and emaciated and having lost the sight of his right eye. They had rather wild but not unpleasant faces, and were both tatued like the Kenyahs. Their hair had been cut short in the prison. I later took the anthropometric measurements of the young man, who was a fine specimen of the savage, with a splendid figure, beautifully formed hands and feet—his movements were elastic and easy.

As it had been found impossible to secure Dayaks in the Bulungan for my expedition to New Guinea, the resident courteously offered to get eighty men from the Mahakam River. This would take at least two months and

gave me opportunity to visit a lake called Sembulo, a considerable distance west of Bandjermasin. It was necessary first to go to Sampit, a small town, two days distant, on a river of the same name, where there is a controleur to whom the resident gave me an introduction, and who would be able to assist in furthering my plans. I could not afford to wait for the monthly steamer which touches at Sampit on its way to Singapore, so I arranged to make the trip on board an old wooden craft which was under repairs in Bandjermasin, and in the afternoon of June 5 we started.

The steamer was small, slow, and heavily laden, so it was not a very pleasant trip. As we sailed down the great Barito River on a dark and cloudy evening, from the deck, which was scarcely a metre above the muddy water, one might observe now and then floating clumps of the plants that thrive so well there. On approaching the mouth of the river the water, with the outgoing tide, became more shallow. The Malay sailor who ascertained the depth of the water by throwing his line and sang out the measures in a melodious air, announced a low figure, which made the captain stop immediately. The anchor was thrown and simultaneously a great noise of escaping steam was heard. Before the engine−room the sailors were seen trying to stop the steam which issued, holding sacks in front of them as a protection against being scalded. Coupled with my observation that there were no life preservers in my little cabin, nor anywhere else, the situation appeared disquieting, but the captain, a small−sized Malay and a good sailor, as all of that race are, reassured me by saying that it was only the glass for controlling the steam−power that was broken. After a while the escape of steam was checked and a new glass was put in.

The old craft kept up its reputation for rolling excessively, and I was glad when finally we entered the smooth waters of the Sampit River. We stopped for a couple of hours at a small kampong, where I made the acquaintance of a Polish engineer in the government's service, who was doing some work here. He told me that thirty years ago, in the inland country west of Kotawaringin, he had seen a young Dayak whose chest, arms, and legs, and most of the face, were covered with hair very similar in colour to that of the orang−utan, though not so thick. The hair on his face was black, as usual. There were no Malays at that head, but many Dayaks. I have heard reports of natives in the Schwaner mountains, who are said to have more hair on the body than Europeans, of a brownish colour, while that on the head is black. Controleur Michielsen, [*] in the report of his journey to the upper Sampit and Katingan in 1880, describes a certain Demang Mangan who had long, thin hair on the head, while on the chest and back it was of the same brown−red colour as that of the orang−utan. His arms were long, his mouth large and forward−stretching, with long upper lip, and his eye glances were shy. Among the Dayaks he was known as mangan (red).

[Footnote *: Controleur W.J. Michielsen, *Verslag einer Reis door de boven distrikten der Sampit en Katingan rivieren in Maart en April*, 1880.]

About noon we arrived at Sampit, a clean, attractive village situated on slightly higher ground than is generally available on Bornean rivers. The stream is broad here, having almost the appearance of a lake. As is the custom, a small park surrounds the controleur's residence, and in the outskirts of the town is a small, well−kept rubber plantation belonging to a German. Sampit is a Katingan word, the name of an edible root, and according to tradition the Katingans occupied the place in times long gone by.

The weather was remarkably dry, so that the tanks at the corners of the controleur's house, on which he depended for water, were becoming depleted. When the fruits of the utan are ripe, the orang−utan may at times be heard crying out in the neighbourhood, but on account of the dry weather they had retired deeper into the jungle. Chonggat shot only one, which was but half−grown and easily killed by a charge of shot. It is often difficult to discover an orang−utan because he has a knack of hiding himself where the foliage is densest, and if alarmed will proceed along the branches of tall trees and thus disappear from sight.

This intelligent, man−like ape is probably not so common in Dutch Borneo as he is supposed to be. Mr. Harry C. Raven, who collected animals in the northeastern part, told me that in a year he had shot only one. The orang−utans are generally found in Southern Borneo and do not go very far inland; in Central Borneo they are extremely rare, almost unknown. It is to be hoped that these interesting animals will not soon be exterminated. A Malay, the only hunter in Sampit, told me that some are so old that they can no longer climb trees. When wounded an orang−utan cries like a child in quite an uncanny manner, as a Dutch friend informed me. According to the Dayaks, it will wrest the spear from its attacker and use it on him. They also maintain, as stated elsewhere, that orang−utans, contrary to the generally accepted belief, are able to swim. Mr. B. Brouers, of Bandjermasin, has seen monkeys swim; the red, the gray, and the black are all capable of this, he said.

From a reliable source I have the following story. Eight Malays who had made camp on a small promontory on the river, one morning were sitting about sunning themselves when they were surprised to see an orang−utan approaching. He entered their camp and one of the Malays nearest to him instinctively drew his parang. Doubtless regarding this as an unfriendly action, he seized one of the poles which formed the main framework of their shelter and pulled it up, breaking the rattan fastenings as if they were paper. The Malays now all attacked with their parangs, but the orang−utan, taking hold of the end of the pole, swept it from side to side with terrifying effect, and as the locality made it impossible to surround him, they all soon had to take to the water to save themselves.

My informant, who had spent several years travelling in Southern Borneo buying rubber from the natives, told me that one day his prahu passed a big orang−utan sitting on the branch of a tree. The Malay paddlers shouted to it derisively, and the animal began to break off branches and hurled sticks at the prahu with astonishing force, making the Malays paddle off as fast as they could. The several points of similarity between man and highly developed monkeys are the cause of the amusing saying of the natives of Java: the monkeys can talk, but they don't want to, because they don't like to work.

The controleur obligingly put the government's steam launch *Selatan* at my disposal, which would take me to the kampong Sembulo on the lake of the same name, whence it was my intention to return eastward, marching partly overland. One evening in the middle of June we started. On entering the sea the small vessel rolled more and more; when the water came over the deck I put on my overcoat and lay down on top of the entrance to the cabin, which was below. The wind was blowing harder than it usually does on the coasts of Borneo, and in the early morning shallow waters, which assume a dirty red−brown colour long before reaching the mouths of the mud−laden rivers, rose into waves that became higher as we approached the wide entrance to the Pembuang River.

The sea washed over the port side as if we were on a sailing−boat, but the water flowed out again through a number of small, oblong doors at the sides which opened and closed mechanically. The launch, which was built in Singapore, behaved well, but we had a good deal of cargo on deck as well as down in the cabin. Besides, the approach to Pembuang River is not without risks. The sand−bars can be passed only at one place, which is twelve or thirteen metres wide and, at low water, less than a metre deep. The route is at present marked out, but in bygone years many ships were wrecked here.

As the sea became more shallow the yellow−crested waves of dirty water mixed with sand assumed an aspect of fury, and lying on my back I seemed to be tossed from one wave to another, while I listened with some apprehension to the melodious report of the man who took the depth of the water: “Fourteen kaki” (feet)! Our boat drew only six feet of water; “Seven kaki,” he sang out, and immediately afterward, “Six kaki!” Now we are “in for it,” I thought. But a few seconds more and we successfully passed the dangerous bar, the waves actually lifting us over it. My two assistants had spent the time on top of the baggage and had been very seasick. We were all glad to arrive in the smooth waters of the river. The captain, with whom later I became well acquainted, was an excellent sailor, both he and the crew being Malays. It was the worst weather he had experienced in the two years he had been at Sampit. According to him, conditions in this part of Borneo may be even more stormy from August to November.

In the Malay kampong, Pembuang, I procured a large pomelo, in Borneo called limao, a delicious juicy fruit of the citrus order, but light−pink inside and with little or no acidity. After the exertions of the night this, together with canned bacon, fried and boiled potatoes, furnished an ideal midday meal. Necessary repairs having been made to the engine, next day, on a charming, peaceful afternoon, we continued our trip up the river. An unusually large number of monkeys were seen on both sides, and the men sat on the railing, with their feet hanging outside, to look at them. The red, long−nosed variety did not retreat, but looked at us calmly from the branch where it sat; other species hurried off, making incredibly long leaps from branch to branch. Shortly after sunset we threw anchor.

Lake Sembulo is about sixteen kilometres long by about one in width. The lake is entered suddenly, amid clumps of a big species of water plant which in season has long white odoriferous flowers. Very striking is the white bottom and the beaches consisting of gravel or sand. How far the sandy region extends I am unable to say, but Mr. Labohm, the chief forester, told me that in the Sampit River region northeast of here, and about twenty metres above the sea, he walked for two days on whitish sand, among rosaceae and azale, the forest being very

thin. The comparatively clear water is slightly tinged with reddish brown on account of its connection with the Pembuang River, which has the usual colour of Bornean rivers. Low receding hills rise all around as we steam along, and the utan, which more or less covers the country, looks attractive, though at first the forests surrounding the ladangs of the Malays are partly defaced by dead trees, purposely killed by fire in order to gain more fields.

After a couple of hours we arrived at kampong Sembulo, which has an alluring look when viewed from the lake, lying on a peninsula with handsome trees which mercifully hide most of the houses. The kapala of this Malay settlement, who came on board in a carefully laundered white cotton suit, had courteous manners. He kindly arranged for three prahus to take us and our belongings ashore.

There was a diminutive pasang−grahan here, neatly made from nipah palm leaves, where I repaired, while Chonggat and Ah Sewey put up tents near by. The presence of two easy chairs which had been brought from Bandjermasin seemed incongruous to the surroundings, and had an irritating rather than restful effect on me. Both Malays and Dayaks are very desirous of securing European furniture for the house of the kapala, and will carry a chair or table for hundreds of miles. On the occasion of my visit to the Kenyah chief of Long Pelaban, in the Bulungan, he immediately went to a heap of baskets and other articles occupying one side of the big room, dug out a heavy table with marble top, which was lying overturned there, and proudly placed it upright before me to be admired. That this piece of furniture had been brought so great a distance over the kihams was almost incomprehensible.

I had a talk with the kapala and a large number of people who soon gathered in front of the pasang−grahan. The Dayaks who originally lived here have disappeared or amalgamated with the Malay intruders, who in this case are largely composed of less desirable elements. It soon became evident that no information could be gained from these people in regard to the traditions of the place. One man said that if I would wait four or five days (in which to be exploited by the wily Malay) he would undertake to bring me three old men of the place, whereupon the kapala, who was more obliging than the rest, went to fetch one of these, who pretended to have no knowledge in such matters.

In order to get relief from the increasing throng of men and boys, I went for a walk, in which I was joined by the kapala and the mantri, a small native police authority whom the controleur had sent with me to be of assistance in making arrangements with the Malays. An old−looking wooden mosque, twenty years old according to reports, stands at the turn of the road. Near by is a cemetery covered with a large growth of ferns and grass, which hides the ugly small monuments of the graves. The houses lie along a single street in the shade of cocoanut−palms and other trees. On account of the white sand that forms the ground everything looks clean, and the green foliage of handsome trees was superb. Everywhere silence reigned, for the women, being Mohammedans, remain as much as possible inside the houses, and no voice of playing or crying child was heard.

On returning from our walk, near sunset, I asked the kapala how much I had to pay for the bringing ashore of my baggage. “Fifteen rupia" (florins) was the answer. As things go in Borneo this was an incredibly excessive charge, and as my intention was to go by boat to the Dayak kampong on the lake, and from there march overland to the small river, Kuala Sampit, I demanded to know how much then I would have to pay for twenty men that I needed for the journey. “Five rupia a day for each,” he said. Dayaks, who are far more efficient and reliable, are satisfied with one rupia a day. Those near by protested that it was not too much, because in gathering rubber they made even more a day. At that rate it would have cost me a hundred florins a day, besides their food, with the prospects of having strikes for higher pay all the way, according to the Malay custom.

Luckily the *Selatan* had delayed its departure until next morning, so I was not yet at the mercy of the greedy natives. The kapala seemed to have as little influence with the people as the mantri, who plainly was afraid of them. I got a prahu and went out to the captain, who arranged to take us back next day, away from these inhospitable shores. At dusk he accompanied me ashore, and in a refreshingly courageous manner read them the text, telling them that I, who came recommended from the Governor−General, was entitled to consideration; that it was a disgrace to the Malay name to behave as they had done, etc. While I was eating my evening meal two long rows of men were sitting outside on the ground, watching the performance with close attention.

Next morning the *Selatan's* boat came to assist in bringing us on board again. After the captain's severe arraignment last night the mantri seemed to have spurred up his courage. He said that two rupia would be sufficient to pay for our luggage. I gave one ringit (f. 2.50), which the captain said was ample. The kapala, who had exerted himself to get our things on board again, thanked me for the visit and we steamed away, arriving

safely in Sampit a couple of days later.

CHAPTER XII

THE WAR CHANGES MY PLANS—CHOLERA—UP THE GREAT BARITO RIVER—PURUK TJAHU— DECIDE TO STAY AMONG THE MURUNGS—A DANCING FEAST

In the beginning of July I returned to Bandjermasin, where I packed my collections and despatched them to Europe. I decided to send what goods I had, with my two assistants, to Macassar on Celebes, where the Dayaks who were to take part in the New Guinea undertaking would also be transported. It might be possible for Chonggat to do some collecting in the neighbourhood of the town. At all events, it would be more convenient to have them wait for me there than to take them to Java. Having secured passes from the resident for the two men, and given them recommendations to the Norwegian consul in Macassar, I departed for Batavia to take the last steps in fitting out my expedition to New Guinea.

At this stage of my proceedings the war broke out. On August 6 I had an audience of the Governor−General, who informed me that he was then unable to let me have either soldiers or ship for my explorations. The day before he had recalled his own great expedition on the Mamberamo in Northern New Guinea, and advised me to wait for a more favourable opportunity, promising that he would later give me all assistance. The commanding general was equally agreeable. As I had never been in British India I decided to go there while awaiting developments regarding the war, so the following Saturday found me on my way to Singapore. Here I first arranged for the safe return of my two assistants, who had been left in Macassar, where cholera had broken out. Usually natives, who range under the category of labourers, go as deck−passengers on steamers in the East. Therefore, after I had bought second−class tickets for them, and the Dutch Packet Boat Company had courteously offered to have a man meet them on arrival, I felt satisfied that they would have no trouble in landing. I then continued my journey over Penang to Madras.

In spite of the continuation of the war and the great fascination of India, in April, the following year, 1915, I decided to return to the Dutch Indies and undertake an expedition to Central Borneo, parts of which are unexplored and unknown to the outside world. Briefly, my plans were to start from Bandjermasin in the south, ascend the Barito River, and, branching hence into its northern tributary, the Busang, to cross the watershed to the Mahakam or Kutei River. Following the latter to its mouth I should reach the east coast near Samarinda. This journey, I found, would take me through a country where were some tribes never before studied.

At Colombo I took the Dutch steamer *Grotius*, which gave me a very pleasant week. The Dutch are a kindly nation. There were fifteen children on first−class playing on deck, and I never heard them cry nor saw them fighting. After more than nine months' absence I again found myself in Batavia, and from there I went to Buitenzorg to ask an audience of the Governor−General. He offered to give me all assistance in furthering my project, and I had the pleasure of being invited to dine at the palace. A large open carriage, with quaint, old−fashioned lanterns, called for me. The coachman and footman were liveried Javanese. It was a beautiful, cool, starlit evening in the middle of June when we drove up the imposing avenue of banyan−trees which leads to the main entrance. The interior of the palace is cool and dignified in appearance, and the Javanese waiters in long, gold−embroidered liveries, whose nude feet passed silently over the marble floor, were in complete accord with the setting.

Several weeks had to be spent in preparation for the trip. It was decided that in Borneo I should be furnished with a small escort. Further, Mr. J. Demmini, photographer in the well−known Topografische Dienst in Batavia, was attached to the expedition, as well as Mr. H.P. Loing, a native surveyor of the same institution. After much searching I finally found a man, Rajimin, a native of Batavia, who seemed competent to collect birds and animals. My kinematograph was out of order, but fortunately I succeeded in replacing it with a secondhand Pathe. The first week in August we departed from Tandjong Priok by steamer, bound for Bandjermasin, Borneo.

On our arrival in Sourabaia we learned that cholera was prevalent in Bandjermasin, and our steamer carried serum for the doctors of the garrison there. Early in the morning we steamed up the river, viewing the usual scene of Malays bathing and children running out of the houses to see the steamer pass. The most urgent matter demanding attention was to have Rajimin, the taxidermist, vaccinated, as well as the two native boys I had brought from Batavia. There were nine deaths a day, but while it is unpleasant to be at a place where such an

epidemic is raging, there is reassurance in the knowledge that the bacillus must enter through the mouth, and that therefore, with proper precautions, it is unnecessary for anybody to have cholera.

A Dutch doctor in Sourabaia told me that he had been practising two years on the Barito River in Borneo, and had gone through a severe epidemic of cholera, but neither he nor his wife had been affected, although their native boy, while waiting at table, fell to the floor and in two hours expired. His wife disinfected plates, forks, spoons, and even the fruit, in a weak solution of permanganate of potassium. Of course there must be no alcoholic excesses. In the tropics it is also essential, for several reasons, always to boil the drinking water.

The Dutch use an effective cholera essence, and if the remedy is applied immediately the chances for recovery from the attack are favourable. The lieutenant who accompanied me through Central Borneo told me that he saved the life of his wife by immediately initiating treatment internally as well as by bathing, without waiting for the doctor's arrival, for the attack occurred in the middle of the night. After three or four hours she was out of danger. One evening at the Bandjermasin hotel I was startled by seeing our three Javanese men taking a sudden and determined departure, carrying all their belongings. One of the hotel boys who occupied the room next to them had shown the well−known symptoms of cholera, whereupon they immediately decamped. I at once informed the manager, who gave the boy a dose of cholera essence, and an hour later he was better. The next morning he was still improving, and on the following day I saw him waiting at table.

The resident, Mr. L.F.J. Rijckmans, was kind enough to order the government's good river steamer *Otto* to take us up the Barito River to Puruk Tjahu, a distant township, where boats and men might be secured and where the garrison would supply me with a small escort. Toward the end of August we departed. On account of the shallow water the *Otto* has a flat bottom and is propelled by a large wheel at the stern. We had 5,000 kilograms of provisions on board, chiefly rice and dried fish, all stored in tin cans carefully closed with solder. There were also numerous packages containing various necessary articles, the assorting of which would be more conveniently done in Puruk Tjahu. We also brought furniture for a new pasang−grahan in Muara Tewe, but the steamer could have taken much more.

The evening of our departure was delightful, and a full moon shed its light over the utan and the river. I occupied a large round room on the upper deck, and felt both comfortable and happy at being “on the move” again. Anchoring at night, there are about five days' travel on the majestic river, passing now and then peaceful−looking kampongs where people live in touch with nature. A feeling of peace and contentment possessed me. “I do not think I shall miss even the newspapers,” I find written in my diary.

On approaching Muara Tewe we saw low mountains for the first time, and here the river becomes narrower and deeper, though even at the last−named place it is 350 metres wide. The water assumed a deeper reddish colour and was speckled with foam, indicating a certain amount of flood caused by rains higher up the river. We passed a family of wild pigs grubbing up the muddy beach in search of roots. There was a large dark one and a huge yellowish−white one, besides four young pigs dark in colour. At Muara Tewe, where we had to make a stay of two days, the doctor of the garrison said that in the case of the common species of wild pigs the full−grown ones are always light in hue. Doctor Tjon Akieh, who came here from Surinam, had some amusing monkeys, a native bear, tamer than most cats, and a very quiet deer. In a steam−launch he had gone four days up the Ajo River, a tributary to the Barito from the east, which passes between limestone cliffs. In that locality the Dayaks are rarely visited by Malays and therefore have retained their excellent tribal characteristics. The men are inclined to obesity.

After leaving Muara Tewe we passed many small kampongs which were less attractive than those at the lower part of the river. The farther one proceeds the more inhabited are the banks. In this vicinity, eleven years previously, a violent Malay revolution which had lasted two years was finally suppressed. As usual, the revolt was headed by a pretender to the sultanate. The steamer in which we travelled was a reminder of those days, for it had two gun−mountings on its deck and my cabin, round in shape, was lightly armoured.

Puruk Tjahu (puruk = small hill; tjahu = running out into the water) lies at a bend of the river in a somewhat hilly and quite attractive country, which is blessed with an agreeable climate and an apparent absence of mosquitoes. The captain in charge of the garrison told me that he, accompanied by the native kapala of the district, was going on a two months' journey northward, and at his invitation I decided to follow him as far as Sungei Paroi. I hoped that on my return a supply of films and plates, ordered from London and already overdue, might have arrived. It was, however, a very difficult proposition to have everything ready in three days, because it

was necessary first to take out of my baggage what was needed for the journey. It meant the opening of 171 boxes and packages. Convicts were assigned to assist in opening and closing these, which afterward were taken to a storehouse, but as I had no mandur I alone had to do the fatiguing work of going through the contents. The doctor of the garrison kindly furnished me with knives and pincers for the taxidermist, as the collector's outfit was missing from the boxes that had been returned from Macassar.

The *Otto* needed only one and a half hours to run down stream to the Muara Laong, a Malay kampong at the mouth of the river Laong, which we intended to ascend by boats to the kampong Batu Boa, where the overland journey was to begin. As soon as we arrived in the afternoon the kapala was sent for to help in procuring a sufficient number of prahus for the next day. I brought twenty−nine coolies from Puruk Tjahu to serve as paddlers. The kapala was unable to find enough prahus, but it had grown dark, so we waited, hoping for better luck next day.

In the morning search was continued, but no great results were obtained. The Malays evidently disliked to rent their boats, which were coming in but slowly. In the meantime our luggage was being unloaded to the landing−float. Mr. Demmini was able to secure some large prahus, among them a specially good one belonging to a Chinaman, and the goods were placed in them. At 11 A.M. all the baggage had been unloaded from the steamer, and having worked like a dog for the last few days I felt that I had earned twenty minutes for my usual bath, applying tepid water from a tin can, with rough mittens. According to the opinion of those best able to judge, bathing−water in the tropics should be of the same temperature as the body, or slightly lower. There are three important items in my personal outfit: A kettle in which drinking water is boiled, another (of a different colour) in which water for bathing is heated, and a five−gallon tin can which serves as a bathtub.

Much refreshed from my bath, I felt ready for further action. In the morning I had requested the captain not to wait for me, and he had already left. At 12 o'clock the *Otto* departed, and a few minutes later our flotilla was under way. We stayed over night at Biha, a small but clean Dayak kampong. The Murungs, as seen here for the first time, are rather shy, dark−complexioned, somewhat short and strongly set people. They are not ugly, though their mouths always seem ungainly. The next day we arrived at a Malay kampong, Muara Topu, which is less attractive on account of its lack of cleanliness and its pretense of being civilised.

I soon realised that it would not be possible to overtake the captain, still less to proceed overland, as our men from Puruk Tjahu were rather a poor lot. They were Malays with the exception of three Dayaks, and one of these, an Ot−Danum, had accepted Islam and therefore had imbibed many Malay ideas. The majority of them were personally amiable, but physically, with few exceptions, they were even below the Malay average, having weak, ill−balanced bodies. I saw one man, when pushing his prahu, fall into the water twice, and the men in my prahu often nearly upset it. In view of these conditions I decided to stop over at the large kampong Tumbang Marowei. Something might be gained by a stay among the Murungs, and meantime the overdue photographic supplies, much needed for our inland expedition, would possibly arrive.

The kampong created a pleasant impression, the space in front toward the river, which the Dayaks are compelled to clear and keep clean, being unusually extensive—almost approaching a boulevard on the river bank. Along this are four communal houses arranged lengthwise, in two pairs, and elevated on upright posts. Between the groups and farther back is a smaller house. There are areca−palms and other trees planted in front, and at the back the vast jungle begins immediately. Most of the people were absent, burning trees and bushes that had been cut down to make new fields for rice−planting, the so−called ladangs, but about sunset they returned, and all were quite friendly in their manners.

We asked the kapala if he could have the people dance in order that we might photograph them, but he said that would not be possible unless a feast were made, a necessary part of which would be the sacrifice of a babi (pig), whereupon an agreement was easily reached that I should pay for the babi six florins, and that the Murungs should perform. The feast was held one day later and was more interesting than I had expected. It took place in front of the house where the kapala resided, and here a sacred pillar stood, by the Katingans and others called kapatong, erected on the occasion of a death.

A striking feature in Dayak kampongs, especially in remote regions, is the presence of such upright pillars, carved more or less completely into human form and standing before the houses. These are invariably for the benefit of a dead person whom they guard, and if the deceased was well provided with earthly goods two or three are furnished. They are made of ironwood and often higher than a man, but usually only the upper part is actually

worked into shape, though many instances are observed of smaller statues the entire surface of which is crudely carved. When a death occurs many duties are incumbent on the surviving relatives, one of the first being to make the kapatong, the soul of which waits on and guards the soul of the departed one.

A good−sized domestic pig had been brought in dependent from a long pole about which its feet had been tied, and it was deposited at the base of the kapatong. One man held an upright stick between the legs of the animal, while another opened the artery of the neck with one thrust of his knife. The pig was next lifted up by the carrying−pole so that the blood might run into a vessel, which was handed to a man who climbed the kapatong and smeared blood on the image of a human being at the top. This indicated that the feast was for the benefit of the soul of that ironwood statue, because it is an invariable custom for the blood of a sacrificed animal to be smeared on the principals of any feast or ceremony, and this is also done when attempting to cure or ward off illness. The same custom obtains in the case of those about to be married; or, if children are to be named, if a move is made to a new home, blood is first daubed on the house.

The pig was then carried a little farther away, where the space was more favourable for dancing, which soon began to our edification. It was the same type of dance that is universal among the Dayaks wherever I have been, although other varieties are seen in Borneo. This principal one consists of moving in a circle around the sacrificial offering, which is lying at the foot of an upright rod to the top of which a piece of cloth is tied, or at the base of a sacred jar (blanga). The participants join hands, and the movement is slow because an essential feature consists in bending the knees—heels together—down and up again, slowly and in time; then, moving one step to the left and bringing right heel to left, the kneeling is repeated, and so on. The men danced for a long time, at first by themselves, then the women by themselves, but most of the time the circle was made up of alternate men and women. The latter, most of them stocky and somewhat coarse−looking, danced with surprising excellence. Though children of nature may be without good looks, there is decided attraction in their grace and easy movements.

It did not look difficult, so I joined in the dancing, as I have done many times among other races. Greatly to the amusement of the natives I demonstrated that I had caught the right steps, and then seated myself in a chair which was the pride of the kapala and which had been brought out for my benefit. While watching the performance I was surprised to see two of the women, about the only ones who possessed any charm of appearance, coming toward me, singing as they advanced. Each took me by a hand and, still singing, led me forward to the dancing circle, where a man who had been offering rice brandy to the people from a huge horn of the water−buffalo adorned with wood shavings, stepped forward and offered it to me. Lifting it I applied my face to the wide opening as if drinking. Twice I pretended to drink, and after participating a while longer in the activities I retired to my place of observation.

No doubt the Dayaks had gladly acceded to my wishes in making the feast, because dancing and sacrifice are believed to attract good spirits which may be of assistance to them. In the evening there was a banquet with the pig as the piece de resistance; and a young fowl was sent to me as a present.

CHAPTER XIII

DAYAK CURE OF DISEASE—EVIL SPIRITS AND GOOD—ANIMISM—BLIANS, THE PRIEST−DOCTORS—THE FEAST OF RUBBER−GATHERERS—WEDDINGS—IN PRIMITIVE SURROUNDINGS

A day or two later the kapala, evidently solicitous about our comfort, asked permission to perform for three consecutive nights certain rites for the purpose of curing several sick persons. The reason for his request was that they might be noisy and prove disturbing to our rest. The ceremonies consisted in singing and beating drums for three hours, in order to attract good spirits and drive away the evil ones that had caused the illness. One of the patients, who had malaria, told me later that he had been cured by the nightly service, which had cost him forty florins to the doctor.

Among the aborigines of Borneo whom I visited, with the possible exception of the Punan nomads, the belief in evil spirits and in good ones that counteract them, both called antoh, is universal, and to some extent has been adopted by the Malays. Though various tribes have their own designations (in the Duhoi (Ot−Danum) untu; Katingan, talum; Kapuas, telun; Kahayan, kambae), still the name antoh is recognised throughout Dutch Borneo. Apprehension of evil being predominant in human minds, the word is enough to cause a shudder even to some Malays. There are many kinds of both evil and good antohs; some are male, some female, and they are invisible, like the wind, but have power to manifest themselves when they desire to do so. Though sometimes appearing as an animal or bird, an antoh usually assumes the shape of a man, though much larger than an ordinary human being. Caves in the mountains are favourite haunts of evil antohs. In the great rivers, like the Barito and the Katingan, are many of huge size, larger than those in the mountains. Trees, animals, and even all lifeless objects, are possessed by antohs good or bad. According to the Katingans the sun is a benevolent masculine antoh which sleeps at night. The moon is a feminine antoh, also beneficent. Stars are the children of the sun and moon—some good, some bad.

To drive away malevolent antohs and attract benignant ones is the problem in the life philosophy of the Dayaks. The evil ones not only make him ill and cause his death, but they are at the bottom of all troubles in life. In order to attract the good ones sacrifices are made of a fowl, a pig, a water−buffalo, or, formerly, a slave. Hens' eggs may also be proffered, but usually as adjuncts to the sacrifice of an animal. If a child is ill the Katingan makes a vow that he will give Antoh from three to seven eggs or more if the child becomes well. If it fails to recover the offering is not made.

The blood is the more precious part, which the Bahau of the Mahakam, and other tribes, offer plain as well as mixed with uncooked rice. The people eat the meat themselves, but some of it is offered to the well−disposed antoh and to the other one as well, for the Dayaks are determined to leave no stone unturned in their purpose of defeating the latter. The Duhoi (Ot−Danums) told me: “When fowl or babi are sacrificed we never forget to throw the blood and rice mixture toward the sun, moon, and 'three of the planets.'“ With the Katingans the blian (priest−doctor) always drinks a little of the blood when an animal is sacrificed.

Singing to the accompaniment of drums, gongs, or the blian's shield, and dancing to the sound of drums or gongs, are further inducements brought to bear on the friendly antohs, which are attracted thereby. According to the belief which prevails in their primitive minds, the music and dancing also have a deterrent effect upon the malicious ones. Both evil and good antohs are believed to congregate on such occasions, but the dancing and music have a terrifying effect on the former, while on the latter they act as an incentive to come nearer and take possession of the performers or of the beneficiary of the function by entering through the top of the head. A primitive jews'−harp, universally found among the tribes, is played to frighten away antohs, and so is the flute.

A kindly antoh may enter a man and become his guardian spirit, to whom he occasionally offers food, but it never remains long because that would make the man insane. One must not step over a person, because a benevolent antoh that may be in possession is liable to be frightened away, say the Katingans and other Dayaks. In dancing with masks, which is much practised on the Mahakam, the idea is that the antoh of the animal represented by the mask enters the dancer through the top of his head.

The Penihings and Long−Glats of the Mahakam have an interesting belief in the existence of a friendly antoh

which reminded me of the superstition of the “Nokken” in the rivers of Norway. It lives in rivers, is very rarely beheld by mortals, and the one who sees it becomes rich beyond dreams of avarice. The Long−Glats call it sangiang, a survival of Hindu influence. An old man in Long Tujo is reported to have seen this antoh, and according to him it had the appearance of a woman sitting underneath the water. No doubt other tribes have the same belief.

The most famous of antohs is the nagah, which may be good or evil, according to the treatment received from mortals, and being very powerful its help and protection are sought in a manner later to be described in connection with my travels on the Mahakam. The nagah guards underneath as well as above the surface of water and earth, but the air is protected by three birds which are messengers, or mail carriers, so to speak. They are able to call the good antoh and carry food to him; they are also attendants of man and watch over him and his food. Fowls and pigs are sacrificed to them as payment. They are—the tingang (hornbill), the sankuvai (formerly on earth but now only in heaven), and the antang (red hawk). As these birds are called by the same names in the tribes of the Katingans, Ot−Danums, Kahayans, and others, it may be presumed that their worship is widely prevalent in Borneo.

Among most if not all native races certain persons occupy themselves with religious services and at the same time cure disease. In Borneo, as far as my experience goes, these priest−doctors, whether male or female, are generally recognised by the name blian, or balian. Although some tribes have their own and different designations, for the sake of convenience I shall call them all blians.

While there are both male and female blians, the service of women is regarded as more valuable, therefore commands higher remuneration than that received by men. A Dayak explained to me: As there are two sexes among the antohs, so there are also male and female blians. He or she on occasion pretends to be possessed of helpful antohs, in some parts of Borneo called sangiangs. Besides assisting the blians in their work they enable them to give advice in regard to the future, illness, or the affairs of daily life. A blian may be possessed by as many as fifty good antohs, which do not remain long at a time. Although in the remote past men sometimes saw good or evil spirits, at present nobody is able to do so except blians, who also sing in a language that only they and the antohs understand.

The blian does not know how to take omens from birds and read the liver of the pig. There may be one expert along this line in the kampong and there may be none. The blians of the tribes visited by me can neither make rain nor afflict people with illness. Among the Long−Glats I saw them directing the great triennial feast tasa, at which they were the chief performers. The constant occupation of the blians, however, is to cure disease which is caused by a malicious antoh longing to eat human blood and desiring to drive away the human soul. When hungry an antoh makes somebody ill. The blian's rites, songs, dances, and sacrifices aim to induce a good antoh to chase away or kill the evil one which has taken possession of the patient, and thus make an opportunity for the frightened soul to return, which restores the man to health. This, without undue generalisation, is a short summary of the religious ideas which I found on the Mahakam and in Southern Borneo, more especially those of the Penihing, Katingan, and Murung. Further details will be found among descriptions of the different tribes.

Shortly afterward we all made an excursion up the river as far as Batu Boa, which, as is often the case, contains a Dayak as well as a Malay kampong. At the first one, a forlorn and desolate looking place, the kapala, who had an unusually large goitre, told me that eighteen men had been engaged by the captain for his journey northward from there, which definitely precluded any prospect of ours for an overland expedition, even if under other conditions it would have been possible. As for the Malays, I found them rather distant, and was glad to return to Tumbang Marowei.

Here a singular sight met us in a sculptured representation of a rhinoceros with a man on his back, entirely composed of red rubber, standing on a float and surrounded by a number of blocks made of the same material. White and red pieces of cloth tied to upright saplings on the float added a certain gaiety to the scene. Some of the kampong people had just returned from a rubber expedition, and part of the output had been cleverly turned into plastics in this way.

The rhino was about seventy−five centimetres high, strong and burly looking, and the posture of the young man on his back conveyed a vivid suggestion of action. They were now on their way to sell this to some Chinaman. The image was said to be worth from two to three hundred florins, and as there was considerable additional rubber, perhaps all of it approached a value of a thousand florins. Bringing this rubber from up country

had occupied eighteen days, and it was the result of ten men's work for two or three months. Twice before during the last two years rubber had been brought here in the same manner.

First they considered it essential to make a feast for the badak (the Malay name for rhinoceros). When going out on their expedition they had promised to make a badak effigy if they found much rubber. As the man on its back represented the owner, there was the risk that one of the souls of the latter might enter his image, resulting in illness for the owner, to avoid which a pig would have to be killed and various ceremonies performed.

The festival was scheduled to take place in three days, but it had to be postponed one day on account of difficulties in procuring the pig. I presented them with three tins of rice and another half full of sugar, which they wanted to mix with water to serve as drink because there was no rice brandy. It required some exertion to bring the heavy image from the float up to the open space in front of the house where the rubber gatherers lived, but this had been done a day or two before the feast, the statue in the meantime having been covered with white cotton cloth. Several metres of the same material had also been raised on poles to form a half enclosure around the main object. The feast had many features in common with the one we had seen, as, for instance, dancing, and a good deal of Malay influence was evident in the clothing of the participants, also in the setting. Nevertheless, the ceremonies, which lasted only about two hours, were not devoid of interest.

The men, manifesting great spontaneity and enthusiasm, gathered quickly about and on the badak, and one of them took the rubber man by the hand. This was followed by pantomimic killing of the badak with a ceremonial spear as well as with parangs, which were struck against its neck. The man who was deputed to kill the pig with the spear missed the artery several times, and as blood was his first objective, he took no care to finish the unfortunate animal, which was still gasping fifteen minutes later.

An old woman then appeared on the scene who waved a bunch of five hens, to be sacrificed, whirling them over and among the performers who were then sitting or standing. The hens were killed in the usual way by cutting the artery of the neck, holding them until blood had been collected, and then leaving them to flap about on the ground until dead. Blood was now smeared on the foreheads of the principal participants, and a young woman danced a graceful solo.

Having ascertained, by sending to the kampong below, that I could obtain twenty men with prahus whenever I intended to move, I discharged with cheerful willingness most of the Puruk Tjahu Malays. Their departure was a relief also to the Murungs, who feared to be exploited by the Malays. As soon as the latter had departed in the morning, many Dayaks whom I had not seen before ventured to come up to the kitchen and my tent to ask for empty tin cans. The Malays had slept in the Dayak houses, and the last night one of them carried off the mat which had been hospitably offered him.

One day there were two weddings here, one in the morning and the other in the evening. A cloth was spread over two big gongs, which were standing close together on the floor and formed seats for the bride and bridegroom. She seemed to be about sixteen years old, and laughed heartily and frequently during the ceremony, which occupied but a few minutes. A man waved a young live hen over and around them, then went away and killed it in the usual manner, returning with the blood, which, with the help of a stick, he smeared on the forehead, chest, neck, hands, and feet of the bridal pair, following which the two mutually daubed each other's foreheads. The principal business connected with marriage had previously been arranged—that of settling how much the prospective bridegroom was to pay to the bride's parents. With most tribes visited I found the adjustment of the financial matter conclusive in itself without further ceremonies.

The officiating blian took hold of a hand of each, pulled them from their seats, and whisked them off as if to say: “Now you can go—you are married!” Outside the full moon bathed the country in the effulgence of its light, but being quite in zenith it looked rather small as it hung in the tropical sky.

The moist heat in the latter part of September and first half of October was more oppressive here than I experienced anywhere else in Borneo. When for a few days there was no rain the temperature was uncomfortable, though hardly rising above 90 F. As there was no wind Rajimin's skins would not dry and many spoiled. Flies, gnats, and other pests were troublesome and made it difficult even to take a bath. Itching was produced on the lower part of the legs, which if scratched would become sores that usually took weeks to heal, and though the application of iodine was of some avail, the wounds would often suppurate, and I have myself at times had fever as a result. The best remedy for these and like injuries on the legs is a compress, or wet bandage, covered with oiled silk, which is a real blessing in the tropics and the material for which any traveller is well advised in adding

to his outfit.

Rain with the resultant cooling of the atmosphere seldom waited long, however, and when the river rose to within a metre of my tent, which I had pitched on the edge of the river bank, I had to abandon it temporarily for the house in which Mr. Demmini and Mr. Loing resided, a little back of the rest of the houses. Besides a kitchen, it contained a large room and a small one, which I appropriated. This house, which was five generations old and belonged to the brother of the kapala, had in its centre an upright pillar carved at the top which passed through the floor without reaching the roof. The house, as is the universal custom in Borneo, stands on piles, and in erecting it a slave who, according to ancient custom, was sacrificed, in that way to insure good luck, had been buried alive underneath the central post, which was more substantial than the others.

During rain it is conducive to a sense of comfort and security to be safely roofed and sheltered in a house, but usually I preferred my tent, and occupied it unless the river was too threatening. From the trees in its close proximity a species of small frog gave concerts every evening, and also occasionally favoured me with a visit. One morning they had left in my quarters a cluster of eggs as large as a fist, of a grey frothy matter, which the ants soon attacked and which later was eaten by the hens.

The fowls, coarse, powerful specimens of the poultry tribe, were a source of great annoyance on account of their number and audacity. As usual among the Malays, from whom the Dayaks originally acquired these domestic birds, interest centres in the males on account of the prevalent cock−fights, and the hens are in a very decided minority. For the night the feathered tribe settles on top of the houses or in the surrounding trees. Hens with small chickens are gathered together in the evening by the clever hands of the Dayak women, hen and brood being put into an incredibly small wicker bag, which is hung up on the gallery for the night. Otherwise carnivorous animals, prowling about, would make short work of them.

At dawn, having duly saluted the coming day, the numerous cocks descend from their high roosts and immediately begin their favourite sport of chasing the few females about. The crowing of these poorly bred but very powerful males creates pandemonium for a couple of hours, and it is like living in a poultry yard with nearly fifty brutal cocks crowing around one. During the remainder of the day sudden raids upon kitchen or tent by one or more of these cocks are of frequent occurrence, usually overturning or otherwise damaging something. Although repeatedly and easily frightened away, they return as soon as they see that the coast is clear again. This is the one nuisance to be encountered in all the kampongs, though rarely to the same extent as here.

CHAPTER XIV

THE SCALY ANT−EATER—THE PORCUPINE—THE BLOW−PIPE—AN UNUSUAL ADVENTURE WITH A SNAKE—HABITS AND CUSTOMS OF THE MURUNGS—AN UNPLEASANT AFFAIR

A Murung one day brought and exhibited to us that extraordinary animal, the scaly ant−eater (*manis*), which is provided with a long pipe−like snout, and is devoid of teeth because its only food, the ant, is gathered by means of its long tongue. The big scales that cover the whole body form its sole defence, and when it rolls itself up the dogs can do it no harm. Unable to run, it cannot even walk fast, and the long tail is held straight out without touching the ground. Its appearance directs one's thoughts back to the monsters of prehistoric times, and the fat meat is highly esteemed by the Dayaks. The animal, which is possessed of incredible strength in proportion to its size, was put in a box from which it escaped in the night through the carelessness of Rajimin.

A large live porcupine was also brought for sale by a Dayak woman who had raised it. The creature was confined in a kind of bag, and by means of its strength it managed to escape from between the hands of the owner. Although she and several Dayaks immediately started in pursuit, it succeeded in eluding them. However, the woman believed implicitly that it would return, and a couple of days later it did reappear, passing my tent at dusk. Every evening afterward about eight o'clock it was a regular visitor, taking food out of my hand and then continuing its trip to the kitchen, which was less than a hundred metres farther up the river bank. Finally it became a nuisance, turning over saucepans to look for food and otherwise annoying us, so I bought it for one ringit in order to have it skinned. The difficulty was to catch it, because its quills are long and sharp; but next evening the Murungs brought it to me enmeshed in a strong net, and how to kill it was the next question.

The Dayaks at once proposed to shoot it with the sumpitan—a very good scheme, though I fancied that darkness might interfere. However, in the light of my hurricane lamp one man squatted on the ground and held the animal, placing it in a half upright position before him. The executioner stepped back about six metres, a distance that I thought unnecessary, considering that if the poisoned dart hit the hand of the man it would be a most serious affair. He put the blow−pipe to his mouth and after a few moments the deadly dart entered the porcupine at one side of the neck. The animal, which almost at once began to quiver, was freed from the entangling net, then suddenly started to run round in a small circle, fell on his back, and was dead in less than a minute after being hit.

It was a wonderful exhibition of the efficiency of the sumpitan and of the accuracy of aim of the man who used the long heavy tube. The pipe, two metres long, is held by the native with his hands close to the mouth, quite contrary to the method we should naturally adopt. The man who coolly held the porcupine might not have been killed if wounded, because the quantity of poison used is less in the case of small game than large. The poison is prepared from the sap of the upas tree, *antiaris toxicaria*, which is heated until it becomes a dark paste. It is a fortunate fact that these extremely efficient weapons, which noiselessly bring down birds and monkeys from great heights, are not widely distributed over the globe. If one is hit by the dart which is used when destined for man or big game, and which has a triangular point, it is said that no remedy will avail.

Rajimin, the taxidermist, had frequent attacks of malaria with high fever, but fortunately he usually recovered rapidly. One day I found him skinning birds with his pulse registering one hundred and twenty−five beats a minute. I engaged a Murung to assist in making my zoological collections, and he learned to skin well and carefully, though slowly. Judging from the number of long−nosed monkeys brought in, they must be numerous here. These animals are at times met in droves of a hundred or more passing from branch to branch through the woods. When old they cannot climb. One morning this Dayak returned with three wah−wahs, and related that after the mother had been shot and had fallen from the tree, the father seized the young one and tried to escape, but they were both killed by the same charge.

On account of adverse weather conditions most of the skins here spoiled, in some degree at least, in spite of all efforts, especially the fleshy noses of the long−nosed monkeys. A special brand of taxidermist's soap from London, which contained several substitutes for arsenic and claimed to be equally efficient, may have been at fault in part, though not entirely, the main cause being the moist heat and the almost entire lack of motility in the air. So little accustomed to wind do the natives here appear to be that a small boy one day jubilantly drew attention to some ripples in the middle of the river caused by an air current.

My Malay cook was taken ill, so I had to do most of the cooking myself, which is not particularly pleasant when one's time is valuable; and when he got well his lack of experience rendered it necessary for me to oversee his culinary operations. One day after returning to my tent from such supervision I had a curious adventure with a snake. It was a warm day about half past one. All was quiet and not a blade stirred. I paused near the tent opening, with my face toward the opposite side of the river, which could be seen through an opening among the trees. Standing motionless on the bank, which from there sloped gradually down toward the river, more than a minute had elapsed when my attention was distracted by a slight noise behind me. Looking to the right and backward my surprise was great to perceive the tail−end of a black snake rapidly proceeding toward the left. Hastily turning my eyes in that direction I beheld the well−shaped, powerful, though somewhat slender, forward part of the serpent, which, holding its head high, almost to the height of my knee, made downward toward the river.

In passing over the open space along the river bank it had found its path obstructed by some boxes, etc., that were in front of the tent opening, and had suddenly changed its route, not noticing me, as I stood there immovable. It thus formed a right angle about me scarcely twenty−five centimetres distant. At first glance its shape suggested the redoubtable king cobra, but two very conspicuous yellow parallel bands running obliquely against each other across the flat, unusually broad head, indicated another species, though probably of the same family.

The formidable head on its narrow neck moved rapidly from side to side; I felt as if surrounded, and although the reptile evidently had no hostile intentions and appeared as much surprised as I was, still, even to a nature lover, our proximity was too close to be entirely agreeable, so I stepped back over the snake. In doing so my foot encountered the kettle that contained my bathing water, and the noise probably alarmed the serpent, which rapidly glided down the little embankment, where it soon reached the grass next to the river and disappeared. It was a magnificent sight to watch the reptile, about two and a half metres in length, jet black and perfectly formed, moving swiftly among the trees. The Malays call this snake, whose venom is deadly, ular hanjalivan, and according to the Murungs a full−grown man dies within half an hour from its bite. This species appears to be fairly numerous here.

At times the natives here showed no disinclination to being photographed, but they wanted wang (money) for posing. Usually I had to pay one florin to each, or fifty cents if the hair was not long. At other times nothing would induce them to submit to the camera. A young woman recently married had a row with her husband one night, and the affair became very boisterous, when suddenly they came to terms. The trouble arose through her desire to earn some pin−money by being photographed in the act of climbing an areca palm, a proceeding which did not meet with his approval.

There were three female blians in the kampong whom I desired to photograph as they performed the dances connected with their office, but the compensation they demanded was so exorbitant (two hundred florins in cash and nine tins of rice) that we did not reach an agreement. Later in the day they reduced their demand to thirty florins for a pig to be used at the dancing, which proposition I also declined, the amount named being at least six times the value of the animal, but I was more fortunate in my dealings with the two male blians of the place, one of them a Dusun, and succeeded in inducing them to dance for me one forenoon.

The two men wore short sarongs around their loins, the women's dress, though somewhat shorter; otherwise they were nude except for bands, to which numerous small metal rattles were attached, running over either shoulder and diagonally across chest and back. After a preliminary trial, during which one of them danced with much elan, he said: “I felt a spirit come down in my body. This will go well.” The music was provided by two men who sat upon long drums and beat them with fervour and abandon. The dance was a spirited movement forward and backward with peculiar steps accompanied by the swaying of the body. The evolutions of the two dancers were slightly different.

In October a patrouille of seventeen native soldiers and nine native convicts, under command of a lieutenant, passed through the kampong. In the same month in 1907 a patrouille had been killed here by the Murungs. It must be admitted that the Dayaks had reason to be aggrieved against the lieutenant, who had sent two Malays from Tumbang Topu to bring to him the kapala's attractive wife—an order which was obeyed with a tragic sequence. The following night, which the military contingent passed at the kampong of the outraged kapala, the lieutenant and thirteen soldiers were killed. Of course the Dayaks had to be punished; the government, however, took the provocation into account.

The kapala's wife and a female companion demanded two florins each for telling folklore, whereupon I expressed a wish first to hear what they were able to tell. The companion insisted on the money first, but the kapala's wife, who was a very nice woman, began to sing, her friend frequently joining in the song. This was the initial prayer, without which there could be no story−telling. She was a blian, and her way of relating legends was to delineate stories in song form, she informed me. As there was nobody to interpret I was reluctantly compelled to dispense with her demonstration, although I had found it interesting to watch the strange expression of her eyes as she sang and the trance−like appearance she maintained. Another noticeable fact was the intense attachment of her dogs, which centred their eyes constantly upon her and accompanied her movements with strange guttural sounds.

With the Murungs, six teeth in the upper front jaw and six in the under one are filed off, and there is no pain associated with the operation. The kapala had had his teeth cut three times, first as a boy, then when he had one child, and again when he had four children. The teeth of one of the blians had been filed twice, once when he was a boy and again when he had two children.

If a man has the means he is free to take four wives, who may all be sisters if he so desires. As to the number of wives a man is allowed to acquire, no exception is made in regard to the kapala. A brother is permitted to marry his sister, and my informant said that the children resulting from this union are strong; but, on the other hand, it is forbidden for cousins to marry, and a still worse offence is for a man to marry the mother of his wife or the sister of one's father or mother. If that transgression has been committed the culprit must pay from one to two hundred rupias, or if he cannot pay he must be killed with parang or klevang (long knife). The children of such union are believed to become weak.

When twelve years of age girls are regarded as marriageable, and sexual relations are absolutely free until marriage; in fact, if she chooses to have a young man share her mat it is considered by no means improper. If a girl should be left with child and the father cannot be found she is married to somebody else, though no man is forced to wed her. Marriage relations are very strict and heavy fines are imposed on people at fault, but divorces may be had provided payment is made, and a widow may remarry if she desires to do so.

When a person dies there is much wailing, and if the deceased is a father or mother people of the same house do not sleep for three days. The corpse remains in the house three days, during which time a root called javau is eaten instead of rice, babi and bananas being also permissible. The body is washed and wrapped in white cotton cloth, bought from Malay traders, and placed in a coffin made of iron−wood. As the coffin must not be carried through the door, the house wall is broken open for it to pass on its way to a cemetery in the utan. Sometimes as soon as one year afterward, but usually much later, the coffin is opened, the bones are cleaned with water and soap and placed in a new box of the same material or in a gutshi, an earthen jar bought from the Chinese. The box or jar is then deposited in a subterranean chamber made of iron−wood, called kobur by both Malays and Murungs, where in addition are left the personal effects of the deceased,—clothing, beads, and other ornaments,—and, if a man, also his sumpitan, parang, axe, etc. This disposition of the bones is accompanied by a very elaborate feast, generally called tiwah, to the preparation of which much time is devoted.

According to a conception which is more or less general among the Dayaks, conditions surrounding the final home of the departed soul are on the whole similar to those existing here, but before the tiwah feast has been observed the soul is compelled to roam about in the jungle three or four years, or longer, until that event takes place. This elaborate ceremony is offered by surviving relatives as an equivalent for whatever was left behind by the deceased, whose ghost is regarded with apprehension.

Fortunately the Murungs were then preparing for such an observance at the Bundang kampong higher up the river where I intended to visit. They were making ready to dispose of the remains of no less a personage than the mother of our kapala. A water−buffalo would be killed and the festival would last for a week. In three years there would be another festal occasion of two weeks' duration, at which a water−buffalo would again be sacrificed, and when a second period of three years has elapsed the final celebration of three weeks' duration will be given, with the same sacrificial offering. Thus the occasions are seen to be of increasing magnitude and the expenses in this case to be on a rising scale. It was comparatively a small affair.

About a month later, when I stopped at Buntok, on the Barito, the controleur of the district told me that an unusually great tiwah feast had just been concluded in the neighbourhood. He had spent ten days there, the Dayaks having erected a house for him to stay in. More than two hundred pigs and nineteen water−buffaloes had

been killed. Over three hundred bodies, or rather remains of bodies, had previously been exhumed and placed in forty boxes, for the accommodation of which a special house had been constructed. These, with contents, were burned and the remains deposited in ten receptacles made of iron−wood, those belonging to one family being put in the same container.

Some of the Dayaks were much preoccupied with preparations for the Bundang ceremony, which was postponed again and again. They encouraged me to participate in the festivities, representing it as a wonderful affair. I presented them with money to buy a sack of rice for the coming occasion, and some of them went at once to Puruk Tjahu to purchase it. Having overcome the usual difficulties in regard to getting prahus and men, and Mr. Demmini having recovered from a week's illness, I was finally, early in November, able to move on. Several people from our kampong went the same day, and it looked as if the feast were really about to take place.

We proceeded with uneventful rapidity up−stream on a lovely day, warm but not oppressively so, and in the afternoon arrived at Bundang, which is a pleasant little kampong. The Dayaks here have three small houses and the Malays have five still smaller. A big water−buffalo, which had been brought from far away to be sacrificed at the coming ceremonial, was grazing in a small field near by. The surrounding scenery was attractive, having in the background a jungle−clad mountain some distance away, which was called by the same name as the kampong, and which, in the clear air against the blue sky, completed a charming picture. We found a primitive, tiny pasang−grahan, inconveniently small for more than one person, and there was hardly space on which to erect my tent.

There appeared to be more Siangs than Murungs here, the former, who are neighbours and evidently allied to the latter, occupying the inland to the north of the great rivers on which the Murungs are chiefly settled, part of the Barito and the Laong. They were shy, friendly natives, and distinguished by well−grown mustaches, an appendage I also later noted among the Upper Katingans. The people told me that I might photograph the arrangements incident to the feast as much as I desired, and also promised to furnish prahus and men when I wished to leave.

The following day Mr. Demmini seemed worse than before, being unable to sleep and without appetite. The festival was to begin in two days, but much to my regret there seemed nothing else to do but to return to Puruk Tjahu. The Dayaks proposed to take the sick man there if I would remain, but he protested against this, and I decided that we should all leave the following day. In the evening I attended the dancing of the Dayak women around an artificial tree made up of bamboo stalks and branches so as to form a very thick trunk. The dancing at the tiwa feast, or connected with it, is of a different character and meaning from the general performance which is to attract good antohs. This one is meant to give pleasure to the departed soul. The scene was inside one of the houses, and fourteen or fifteen different dances were performed, one of them obscene, but presented and accepted with the same seriousness as the other varieties. Some small girls danced extraordinarily well, and their movements were fairylike in unaffected grace.

Enjoying the very pleasant air after the night's rain, we travelled rapidly down−stream on the swollen river to Tumbang Marowei, where we spent the night. There were twenty men from the kampong eager to accompany me on my further journey, but they were swayed to and fro according to the dictates of the kapala, who was resolutely opposed to letting other kampongs obtain possession of us. He wanted to reserve for himself and the kampong the advantages accruing from our need of prahus and men. To his chagrin, in the morning there arrived a large prahu with four Murungs from Batu Boa, who also wanted a chance at this bonanza, whereupon the kapala began to develop schemes to harass us and to compel me to pay more.

Without any reason whatsoever, he said that only ten of the twenty men I had engaged would be able to go. This did not frighten me much, as the river was swollen and the current strong, so that one man in each of our prahus would be sufficient to allow us to drift down to the nearest Malay kampong, where I had been promised men some time before. At first I was quite concerned about the loading of the prahus, as the natives all exhibited a marked disinclination to work, the kapala, as a matter of fact, having ordered a strike. However, with the ten men allowed I was able by degrees to bring all our goods down to the river bank, whereupon the kapala, seeing that I was not to be intimidated, permitted the rest of the men to proceed.

It was an unpleasant affair, which was aggravated by what followed, and was utterly at variance with my other experiences during two years among the Dayaks. I was greatly surprised to observe that some of the men who had been loitering near our goods on the bank of the river had begun to carry off a number of large empty tins which

had been placed there ready for shipment. These are difficult to procure, and being very necessary for conveying rice, salt, and other things, I had declined to give them away. The natives had always been welcome to the small tin cans, also greatly in favour with them. Milk and jam tins are especially in demand, and after they have been thrown away the Dayaks invariably ask if they may have them. As they are very dexterous in wood−work they make nicely carved wooden covers for the tins, in which to keep tobacco or other articles.

Returning from one of many tours I had made back to the house from where our belongings were taken, I caught sight of three Murungs running as fast as they could, each carrying two large tins, the kapala calmly looking on. I told him that unless they were immediately returned I should report the matter to the government. This had the desired effect, and at his order no less than sixteen large tins were promptly produced.

This was surprising, but as a faithful chronicler of things Bornean I feel obliged to tell the incident, the explanation of which to a great extent is the fact that the natives here have been too susceptible to the demoralising Malay influence which has overcome their natural scruples about stealing. It must be admitted that the Dayaks wherever I have been are fond of wang (money), and they are inclined to charge high prices for the articles they are asked to sell. They have, if you like, a childish greed, which, however, is curbed by the influence of their religious belief before it has carried them to the point of stealing. Under continued Malay influence the innate longing for the possession of things very much desired overwhelms them and conquers their scruples.

We afterward discovered that several things were missing, of no great importance except a round black tin case containing thermometers and small instruments, which without doubt had been appropriated by the owner of the house where we had been staying. Two or three weeks previously he had begged me to let him have it, as he liked it much and needed it. I said that was impossible, but evidently he thought otherwise. Perhaps the Murungs are more avaricious than other tribes. I was told in Puruk Tjahu that they were greedy, and it seems also as if their scruples about stealing are less acute than elsewhere in Borneo. The reputation of the Dayaks for honesty is great among all who know them. As far as my knowledge goes the Murungs are mild−mannered and polite, but not particularly intelligent. The higher−class people, however, are intelligent and alert, manifesting firmness and strength of mind.

It was one o'clock before we were able to start, but circumstances favoured us, and after dark we reached the kampong at the mouth of the Laong River, where we made ourselves quite comfortable on the landing float, and I rejoiced at our recent escape from an unpleasant situation. The following day we arrived at Puruk Tjahu. After a few days' stay it was found expedient to return to Bandjermasin before starting on the proposed expedition through Central Borneo. A small steamer belonging to the Royal Packet Boat Company maintains fortnightly connections between the two places, and it takes only a little over two days to go down−stream.

CHAPTER XV

FINAL START FOR CENTRAL BORNEO—CHRISTMAS TIME—EXTENT OF MALAY INFLUENCE—THE FLOWERS OF EQUATORIAL REGIONS—AT AN OT−DANUM KAMPONG—THE PICTURESQUE KIHAMS, OR RAPIDS—FORMIDABLE OBSTACLES TO TRAVEL—MALAYS ON STRIKE

Having arranged various matters connected with the expedition, in the beginning of December we made our final start from Bandjermasin in the *Otto*, which the resident again courteously placed at my disposal. Our party was augmented by a military escort, under command of Onder−Lieutenant J. Van Dijl, consisting of one Javanese sergeant and six native soldiers, most of them Javanese. At midday the surface of the water was absolutely without a ripple, and the broad expanse of the river, ever winding in large curves, reflected the sky and the low jungle on either side with bewildering faithfulness. At night the stars were reflected in the water in the same extraordinary way.

In order to investigate a report from an otherwise reliable source about Dayaks “as white as Europeans, with coarse brown hair, and children with blue eyes,” I made a stop at Rubea, two or three hours below Muara Tewe. It was a small and sad−looking kampong of thirteen families in many houses. Several children were seen, a little lighter of colour than usual, but their eyes were brown, and there was nothing specially remarkable about them nor the rest of the people whom the kapala called from the ladangs. Children lighter than the parents is a usual phenomenon in black and brown races. There was, however, one four−year−old boy conspicuous for his light hair and general blondness, who was different from the ordinary Dayak in frame and some of his movements; he was coarsely built, with thick limbs, big square head, and hands and feet strikingly large. There could be no doubt about his being a half−breed, neither face nor expression being Dayak. One hare−lipped woman and a child born blind were observed here. Other kampongs in the inland neighbourhood, mentioned in the same report, were not visited.

On our arrival at Puruk Tjahu the low water at first made it doubtful whether the *Otto* would be able to proceed further, but during the night it rose five metres, continued rising, and changed into a swollen river, as in springtime, carrying sticks and logs on its dirty reddish waters. After a foggy morning the sun came out and we had an enchanting day's journey, the movement of the ship producing a soft breeze of balmy air after the rainy night and morning. We passed a timber float stranded on high ground, with Malay men, women, and children who had been living there for weeks, waiting for the water to rise again as high as where it had left them. They evidently enjoyed the unusual sight of the steamer, and followed us attentively.

In the afternoon we arrived at Poru, a small, oppressively warm kampong, deserted but for an old man and one family, the others having gone to gather rattan in the utan. This was to be our starting−point, where our baggage would have to be put in convenient shape for travel in boat and overland, and where we hoped it might be possible to buy prahus and obtain men by searching the kampongs higher up the river. In this we were disappointed, so the lieutenant went back to Puruk Tjahu, in the neighbourhood of which are many kampongs, nearly all Malay, there as well as here. He took with him one soldier who had proved to have an obnoxious disease, leaving us with five for the expedition, which we deemed sufficient.

On Christmas day I bought from an old Dayak a large, ripe fruit called in Malay nangca (*artocarpus integrifolia*) of the jack fruit family. It is very common. Before maturing it is used as an every−day vegetable, which is boiled before eating. I was surprised to find that when fully ripe this fruit has an agreeable flavour of banana, but its contents being sticky it is difficult to eat. The sergeant, with the culinary ability of the Javanese, prepared for the holiday a kind of stew, called sambil goreng, which is made on the same principle as the Mexican variety, but decidedly superior. Besides the meat or fish, or whatever is used as the foundation, it contains eight ingredients and condiments, all indigenous except red pepper and onions.

In the ladangs is cultivated the maize plant, which just then was in condition to provide us with the coveted green corn, and carried my thoughts to America, whence the plant came. Maize is raised on a very limited scale, and, strange to say, higher up the river the season was already over. At Poru we tried in vain to secure a kind of gibbon that we heard almost daily on the other side of the river, emitting a loud cry but different from that of the

ordinary wah−wah. Rajimin described it as being white about the head and having a pronounced kind of topknot.

As far as we had advanced up the Barito River, Malay influence was found to be supreme. The majority of the kampongs are peopled by Malays, Dayaks at times living in a separate section. This relation may continue at the lower courses of the tributaries, yielding to a Dayak population at the upper portions. In the kampongs, from our present camp, Poru, up to the Busang tributary, the population continues to be subject to strong Malay influence, the native tribes gradually relinquishing their customs, beliefs, and vernacular. But back from the river on either side the Dayak still easily holds his own.

The old kapala of Poru had an attractive eight−year−old granddaughter, of a singularly active and enterprising disposition, who always accompanied him. He called my attention to the fact that she wore a solid−looking gold bracelet around each wrist, a product of the country. In the dry season when the river is low two or three hundred Dayaks and Malays gather here to wash gold, coming even as far as from Muara Tewe. The gold mixed with silver is made into bracelets, wristlets, or breastplates by these natives.

The lieutenant had been unable to secure more than sixteen men, all Malays, which was insufficient for the six prahus we had bought. Therefore it became necessary to travel in relays, the lieutenant waiting in Poru until our men and prahus should return from Telok Djulo, for which kampong the rest of us started in late December.

After considerable rain the river was high but navigable, and two days' travel brought us to a rather attractive kampong situated on a ridge. Rajimin accompanied by Longko, the principal one of our Malays, went out in the evening to hunt deer, employing the approved Bornean method. With a lamp in the bow the prahu is paddled noiselessly along the river near the bank. Rusa, as a large species of deer are called, come to the water, and instead of being frightened are attracted by the light. Rajimin, who was of an emotional and nervous temperament, missed two plandoks and one rusa, Longko reported, and when he actually killed a rusa he became so excited that he upset the prahu.

We started before seven o'clock on a glorious morning, January first. On the river bank some trees, which did not appear to me to be indigenous, were covered with lovely flowers resembling hibiscus, some scarlet, some yellow. I had my men gather a small bunch, which for several hours proved attractive in the prosaic Malay prahu. The equatorial regions have not the abundance of beautiful flowers that is credited to them by popular belief. The graceful pitcher−plants (*nepenthes*) are wonderful and so are many other extraordinary plant creations here, but they cannot be classed as beautiful flowers in the common acceptation of the word. There are superb flowers in Borneo, among them the finest in existence, orchids, begonias, etc., but on account of the character of their habitats, within a dense jungle, it is generally difficult to see them. The vast majority of orchids are small and inconspicuous, and in hunting for magnificent ones the best plan is to take natives along who will climb or cut down the trees on which they grow.

On the third day the river had become narrow and shallower, and early in the afternoon we arrived at Telok Djulo, a kampong of Ot−Danums interspersed with Malays. It is composed of many houses, forming one side of an irregular street, all surrounded with a low fence for the purpose of keeping pigs out. The storehouses recalled those of the Bulungan, with their wide wooden rings around the tops of the supporting pillars, to prevent mice from ascending. Outside of the fence near the jungle two water−buffaloes were always to be seen in the forenoon lying in a mud−pool; these we were warned against as being dangerous. These Dayaks, who are shy but very friendly, are said to have immigrated here over thirty years ago. They are mostly of medium size, the women stocky, with thick ankles, though otherwise their figures are quite good. The Ot−Danum men, like the Murungs, Siangs, and Katingans, place conspicuously on the calf of the leg a large tatu mark representing the full moon. When preparing to be photographed, men, women, and children decorate their chests with crudely made gold plates shaped nearly like a half moon and hanging one above another, generally five in number. One of the blians was a Malay.

Here we had to stay two weeks, while the remainder of our baggage was being brought up and until a new station for storing goods had been established in the jungle higher up the river. Rajimin had an attack of dysentery, and although his health improved he requested permission to return, which I readily granted notwithstanding his undeniable ability in skinning birds. He was afraid of the kihams, not a good shot, and so liable to lose his way in the jungle that I always had to have a Dayak accompany him. It is the drawback with all Javanese that, being unaccustomed to these great jungles, at first they easily get lost. Rajimin joined a few Malays in building a small float, on which they went down the river. Several Malays aspired to succeed him as

taxidermist, but showed no aptitude. I then taught one of our Javanese soldiers who had expressed interest in the matter. Being painstaking and also a good shot, the new tokang burong (master of birds), the Malay designation for a taxidermist, gave satisfactory results in due time.

One day while I was taking anthropometric measurements, to which the Ot−Danums grudgingly submitted, one of them exhibited unusual agitation and actually wept. Inquiring the reason, I learned that his wife had jilted him for a Kapuas Dayak who, a couple of nights previously, when the injured man was out hunting wild pigs for me, had taken advantage of the husband's absence. Moreover, the night before, the rival had usurped his place a second time, compelling the husband to go elsewhere. The incident showed how Dayak ideas were yielding to Malay influence. He was in despair about it, and threatened to kill the intruder as well as himself, so I told the sergeant to strengthen the hands of the kapala. I could not prevent the woman's disloyalty to her husband, but the new attraction should not be allowed to stay in the house. This had the effect of making the intruder depart a few minutes later, though he did not go far away. The affair was settled in a most unexpected manner. The kapala being absent, his substitute, *bonhomme mais borne*, and probably influenced by her relatives, decided that the injured husband must pay damages f. 40 because he had vacated his room the night he went out hunting.

We procured one more prahu, but the difficulties of getting more men were very great, one reason being that the people had already begun to cut paddi. Though the new year so far brought us no rain, still the river of late had begun to run high on account of precipitation at its upper courses. High water does not always deter, but rapid rising or falling is fraught with risk. After several days' waiting the status of the water was considered safe, and, leaving three boatloads to be called for later, in the middle of January, we made a start and halted at a sand slope where the river ran narrow among low hills, two hundred metres below the first great kiham. Malay rattan gatherers, with four prahus, were already camped here awaiting a favourable opportunity to negotiate the kihams, and they too were going to make the attempt next morning. As the river might rise unexpectedly, we brought ashore only what was needed for the night.

Next day at half−past six o'clock we started, on a misty, fresh morning, and in a few minutes were within hearing of the roar of the rapids, an invigorating sound and an inspiring sight. The so−called Kiham Atas is one kilometre long. The left side of the river rises perpendicularly over the deep, narrow waters, the lower part bare, but most of it covered with picturesque vegetation, especially conspicuous being rows of sago palms. The prahus had to be dragged up along the opposite side between big stones. Only our instruments were carried overland, as we walked along a foot−path through delightful woods, and at nine o'clock the prahus had finished the ascent.

Not long afterward we approached the first of the four big kihams which still had to be passed and which are more difficult. Having been relieved of their loads the prahus were hauled, one at a time, around a big promontory situated just opposite a beautiful cascade that falls into the river on the mountainous side. Around the promontory the water forms treacherous currents. Above it eight or nine Malays pulled the rattan cable, which was three times as long as usual, and when the first prahu, one man inside, came into view from below, passing the promontory, it unexpectedly shot out into the middle of the river, and then, in an equally startling manner, turned into a back current. This rapidly carried it toward an almost invisible rock where Longko, who was an old hand on this river, had taken his stand among the waves and kept it from foundering. The Malays were pulling the rattan as fast as they could, running at times, but before the prahu could be hauled up to safety it still had to pass a hidden rock some distance out. It ran against this and made a disagreeable turn, but regained its balance.

The next one nearly turned over, and Mr. Demmini decided to take out the kinema camera, which was got in readiness to film the picturesque scene. In the meantime, in order to control the prahu from the side, a second rattan rope had been tied to the following one, thereby enabling the men to keep it from going too far out. This should have been done at the start, but the Malays always like to take their chances. Though the remaining prahus did not present such exciting spectacles, nevertheless the scene was uncommonly picturesque. After nine hours of heavy work, during most of which the men had kept running from stone to stone dragging rattan cables, we camped on a sand−ridge that ran out as a peninsula into the river. At one side was an inlet of calm, dark−coloured water into which, a hundred metres away, a tributary emptied itself into a lovely waterfall. A full moon rose over the enchanting landscape.

At half−past six in the morning we started for the next kiham, the so−called Kiham Mudang, where we arrived an hour later. This was the most impressive of all the rapids so far, the river flowing between narrow confines in a steady down−grade course, which at first sight seemed impossible of ascent. The river had fallen half a metre

since the day before, and although most kihams are easier to pass at low water, this one was more difficult. The men, standing in water up to their arms, brought all the luggage ashore and carried it further up the river. Next the prahus were successfully pulled up, being kept as near land as possible and tossed like toys on the angry waves, and pushed in and out of small inlets between the big stones. In three hours we effected the passage and in the afternoon arrived at Tumbang Djuloi, a rather prettily situated kampong on a ridge along the river.

I was installed in a small house which was vacant at one end of the little village, the greater part of which is Malay. There were two houses belonging to Ot−Danums which I found locked with modern padlocks. Nearly all Malays and Dayaks were at the ladangs, where they spend most of their time, remaining over night. Coal, which is often found on the upper part of the Barito River, may be observed in the bank of the river in a layer two metres thick. It is of good quality, but at present cannot be utilised on account of the formidable obstacle to transportation presented by the kiham below.

Our Malays soon began to talk of returning, fifteen of the twenty−four men wanting to go home. Payment having been refused until the goods left below had been brought up, a settlement was reached and the necessary men, with the sergeant, departed for Telok Djulo. In the meantime we began to convey our belongings higher up the river, above the next kiham, where they were stored in the jungle and covered with a tent cloth.

After the arrival of the luggage which had been left behind, there was a universal clamour for returning home, the Malays professing great disinclination to proceeding through the difficult Busang country ahead of us. Even those from Puruk Tjahu, who had pledged themselves to continue to the end, backed out. Though wages were raised to f. 1.50 per day, only eight men remained. To this number we were able to add three Malays from the kampong. One was the Mohammedan guru (priest), another a mild−tempered Malay who always had bad luck, losing floats of rattan in the kihams, and therefore passed under the nickname of tokang karam (master of misfortune). The third was a strong, tall man with some Dayak blood, who was tatued. Djobing, as he was named, belonged to a camp of rattan workers up on the Busang, and decided to go at the last moment, no doubt utilising the occasion as a convenient way of returning.

I was glad to see him climb down the steep embankment, carrying in one hand a five−gallon tin, neatly painted, which had opening and cover at the long side, to which a handle was attached. Under the other arm he had the usual outfit of a travelling Malay, a mat, on which he slept at night and in which were wrapped a sheet and a few pieces of light clothing. His tin case was full of tobacco and brought forth disparaging remarks from the lieutenant, who was chary of the precious space in the prahus.

Having successfully passed the censor Djobing was assigned to my prahu, where he soon showed himself to be a very good man, as alert as a Dayak and not inclined to save himself trouble. He would jump into the water up to his neck to push and steer the prahu, or, in the fashion of the Dayaks and the best Malays, would place his strong back under and against it to help it off when grounded on a rock. When circumstances require quick action such men will dive under the prahu and put their backs to it from the other side.

There was little chance of more paddling, the prahus being poled or dragged by rattan, and many smaller kihams were passed. We entered the Busang River, which is barely thirty−five metres wide at its mouth, flowing through hilly country. The water was low at that time, but is liable to rise quickly, through rains, and as it has little opportunity for expansion at the sides the current flows with such violence that travel becomes impossible. The most difficult part of our journey lay before us, and the possibility of one or two, or even three months' delay on account of weather conditions is then taken as a matter of course by the natives, though I trusted to have better luck than that.

CHAPTER XVI

ARRIVAL AT BAHANDANG—ON THE EQUATOR—A STARTLING ROBBERY—OUR MOST LABORIOUS JOURNEY—HORN−BILLS—THE SNAKE AND THE INTREPID PENYAHBONG—ARRIVAL AT TAMALOE

Bahandang, where we arrived early in the second afternoon, is the headquarters of some Malay rubber and rattan gatherers of the surrounding utan. A house had been built at the conflux with the river of a small affluent, and here lived an old Malay who was employed in receiving the products from the workers in the field. Only his wife was present, he having gone to Naan on the Djuloi River, but was expected to return soon. The place is unattractive and looked abandoned. Evidently at a previous time effort had been made to clear the jungle and to cultivate bananas and cassavas. Among felled trees and the exuberance of a new growth of vegetation a few straggling bananas were observable, but all the big cassava plants had been uprooted and turned over by the wild pigs, tending to increase the dismal look of the place. A lieutenant in charge of a patrouille had put up a rough pasang−grahan here, where our lieutenant and the soldiers took refuge, while I had the ground cleared near one end of it, and there placed my tent.

Not far off stood a magnificent tree with full, straight stem, towering in lonely solitude fifty metres above the overgrown clearing. In a straight line up its tall trunk wooden plugs had been driven in firmly about thirty centimetres apart. This is the way Dayaks, and Malays who have learned it from them, climb trees to get the honey and wax of the bees' nests suspended from the high branches. On the Barito, from the deck of the *Otto*, I had observed similar contrivances on still taller trees of the same kind called tapang, which are left standing when the jungle is cleared to make ladangs.

A few days later the rest of our party arrived and, having picked up six rubber gatherers, brought the remainder of the luggage from their camp. Some men were then sent to bring up the goods stored in the utan below, and on February 3 this was accomplished. An Ot−Danum from the Djuloi River, with wife and daughter, camped here for a few days, hunting for gold in the river soil, which is auriferous as in many other rivers of Borneo. They told me they were glad to make sixty cents a day, and if they were lucky the result might be two florins.

We found ourselves in the midst of the vast jungles that cover Borneo, serving to keep the atmosphere cool and prevent air currents from ascending in these windless tropics. We were almost exactly on the equator, at an elevation of about 100 metres. In January there had been little rain and in daytime the weather had been rather muggy, but with no excessive heat to speak of, provided one's raiment is suited to the tropics. On the last day of the month, at seven o'clock in the morning, after a clear and beautiful night, the temperature was 72 F. (22 C.). During the additional three weeks passed here, showers fell occasionally and sometimes it rained all night. As a rule the days were bright, warm, and beautiful; the few which were cloudy seemed actually chilly and made one desire the return of the sun.

Our first task was to make arrangements for the further journey up the Busang River to Tamaloe, a remote kampong recently formed by the Penyahbongs on the upper part of the river. We were about to enter the great accumulation of kihams which make travel on the Busang peculiarly difficult. The lieutenant's hope that we might secure more men from among the rubber gatherers was not fulfilled. The few who were present made excuses, and as for the others, they were far away in the utan, nobody knew where. We still had some Malays, and, always scheming for money or advantage to themselves, they began to invent new difficulties and demand higher wages. Although I was willing to make allowances, it was impossible to go beyond a certain limit, because the tribes we should meet later would demand the same payment as their predecessors had received. The old Malay resident, who in the meantime had returned from his absence, could offer no advice.

Finally exorbitant wages were demanded, and all wanted to return except four. As the lieutenant had expressed his willingness to proceed to Tamaloe in advance of the party and try to hire the necessary men there, it was immediately decided that he should start with our four remaining men and one soldier, while the rest of us waited here with the sergeant and four soldiers. On February 4 the party was off, as lightly equipped as possible, and if all went well we expected to have the necessary men within three weeks.

On the same afternoon Djobing and three companions, who were going up to another rattan station, Djudjang, on a path through the jungle, proposed to me to transport some of our luggage in one of my prahus. The offer was gladly accepted, a liberal price paid, and similar tempting conditions offered if they and a few men, known to be at the station above, would unite in taking all our goods up that far. The following morning they started off.

The Malays of these regions, who are mainly from the upper part of the Kapuas River in the western division and began to come here ten years previously, are physically much superior to the Malays we brought, and for work in the kihams are as fine as Dayaks. They remain here for years, spending two or three months at a time in the utan. Djobing had been here four years and had a wife in his native country. There are said to be 150 Malays engaged in gathering rattan, and, no doubt, also rubber, in these vast, otherwise uninhabited upper Dusun lands.

What with the absence of natives and the scarcity of animals and birds, the time spent here waiting was not exactly pleasant. Notwithstanding the combined efforts of the collector, the sergeant, and one other soldier, few specimens were brought in. Mr. Demmini, the photographer, and Mr. Loing were afflicted with dysentery, from which they recovered in a week.

As a climax came the startling discovery that one of the two money−boxes belonging to the expedition, containing f. 3,000 in silver, had been stolen one night from my tent, a few feet away from the pasang−grahan. They were both standing at one side covered with a bag, and while it was possible for two men to carry off such a heavy box if one of them lifted the tent wall, still the theft implied an amount of audacity and skill with which hitherto I had not credited the Malays. The rain clattering on the roof of the tent, and the fact that, contrary to Dutch custom, I always extinguished my lamp at night, was in their favour. After this occurrence the lamp at night always hung lighted outside of the tent door. All evidence pointed to the four men from Tumbang Djuloi who recently left us. The sergeant had noticed their prahus departing from a point lower down than convenience would dictate, and, as a matter of fact, nobody else could have done it. But they were gone, we were in seclusion, and there was nobody to send anywhere.

In the middle of February we had twenty−nine men here from Tamaloe, twenty of them Penyahbongs and the remainder Malays. The lieutenant had been successful, and the men had only used two days in coming down with the current. They were in charge of a Malay called Bangsul, who formerly had been in the service of a Dutch official, and whose fortune had brought him to distant Tamaloe, where he had acquired a dominating position over the Penyahbongs. I wrote a report of the robbery to the captain in Puruk Tjahu, and sent Longko to Tumbang Djuloi to deliver it to the kapala, who was requested to forward it. There the matter ended.

I was determined that the loss, though at the time a hard blow, should not interfere with the carrying out of my plans. By rigid economy it could, at least partially, be offset, and besides, I felt sure that if the necessity arose it would be possible later to secure silver from Dutch officials on the lower Mahakam River. Bangsul and some Penyahbongs, at my request, searched in the surrounding jungle growth and found a hole that had been dug of the same size and shape as the stolen box, where no doubt it had been deposited until taken on board the prahu.

The day previous to our departure Mr. Demmini again was taken ill, and in accordance with his own wish it was decided that he should return. I let him have Longko in command of one of the best prahus, and in time he arrived safely in Batavia, where he had to undergo further treatment. Longko, the Malay with the reputation for reliability, never brought back the men and the prahu; their loss, however, was greater than mine, as their wages, pending good behaviour, were mostly unpaid.

Shortly after their prahu had disappeared from view, on February 20, we departed in the opposite direction. Our new crew, of Penyahbongs mostly, who only lately have become acquainted with prahus, were not quite so efficient as the former, but much more amiable, laughing and cracking jokes with each other as they ran along over the rocks, pulling the rattan ropes of the prahus. No sooner did we ascend one kiham than we arrived at another, but they were still small. Although the day was unusually warm, there was a refreshing coolness in the shade under the trees that grow among the rocks along the river.

Early in the afternoon we camped at the foot of the first of twelve great kihams which must be passed before arriving at Djudjang, the rattan gatherers' camp. During a heavy shower a Penyahbong went into the jungle with his sumpitan and returned with a young rusa, quarters of which he presented to Mr. Loing and myself. Bangsul had travelled here before, and he thought we probably would need two weeks for the journey to Djudjang from where, under good weather conditions, three days' poling should bring us to Tamaloe. He had once been obliged to spend nearly three months on this trip.

We spent one day here, while all our goods were being taken on human backs to a place some distance above the kiham. Four Malays and one Penyahbong wanted remedies for diseases they professed to have. The latter seemed really ill and had to be excused from work. The rest said they suffered from demum (malaria), a word that has become an expression for most cases of indisposition, and I gave them quinine. The natives crave the remedies the traveller carries, which they think will do them good whether needed or not.

Much annoyance is experienced from Malays in out−of−the−way places presenting their ailments, real or fancied, to the traveller's attention. The Dayaks, not being forward, are much less annoying, though equally desirous of the white man's medicine. An Ot−Danum once wanted a cure for a few white spots on the finger−nails. In the previous camp a Penyahbong had consulted me for a stomach−ache and I gave him what I had at hand, a small quantity of cholera essence much diluted in a cup of water. All the rest insisted on having a taste of it, smacking their lips with evident relish.

Early next morning the prahus were hauled up the rapids and then loaded, after which the journey was continued through a smiling, slightly mountainous country, with trees hanging over the river. We actually had a course of smooth water, and before us, near the horizon, stretched two long ridges with flat summits falling abruptly down at either side of the river. At two o'clock in the afternoon we reached the foot of two big kihams, and Bangsul considered it time to camp. It must be admitted that the work was hard and progress necessarily slow. Nevertheless, it was so early in the day that I suggested going a little further. Soon, however, seeing the futility of trying to bring him to my way of thinking, I began arrangements for making camp. Better to go slowly than not to travel at all. Close to my tent, growing on low trees, were a great number of beautiful yellow and white orchids.

Toward sunset, Bangsul surprised me by bringing all the men to my tent. He said they wanted to go home because they were afraid I should expect too much of them, as they all wanted to travel plan−plan (slowly). The Penyahbongs before me were of a decent sort, and even the Malays were a little more gentle and honest than usual. Bangsul was “the whole thing,” and I felt myself equal to the situation. This was his first attempt at a strike for higher wages and came unexpectedly soon, but was quickly settled by my offer to raise the wages for the six most useful and strongest men.

After our baggage had been stored above the head of the kihams, and the prahus had been taken up to the same place, we followed overland. As we broke camp two argus pheasants flew over the utan through the mist which the sun was trying to disperse. We walked along the stony course of the rapids, and when the jungle now and then allowed a peep at the roaring waters it seemed incredible that the prahus had been hauled up along the other side. Half an hour's walk brought us to the head of the kihams where the men were loading the prahus that were lying peacefully in still waters. The watchmen who had slept here pointed out a tree where about twenty argus pheasants had roosted.

Waiting for the prahus to be loaded, I sat down on one of the big stones of the river bank to enjoy a small landscape that presented itself on the west side of the stream. When long accustomed to the enclosing walls of the dark jungle a change is grateful to the eye. Against the sky rose a bold chalk cliff over 200 metres high with wooded summit, the edge fringed with sago palms in a very decorative manner. This is one of the two ridges we had seen at a distance; the other is higher and was passed further up the river. From the foot of the cliff the jungle sloped steeply down toward the water. The blue sky, a few drifting white clouds, the beautiful light of the fresh, glorious morning, afforded moments of delight that made one forget all the trouble encountered in getting here. It seems as if the places least visited by men are the most attractive.

Four hornbills were flying about. They settled on the branches of a tall dead tree that towered high above the jungle and deported themselves in strange ways, moving busily about on the branch; after a few minutes three of them flew away, the other remaining quietly behind. There are several kinds of hornbills; they are peculiar birds in that the male is said to close with mud the entrance to the nest in the hollow stem of the tree, thus confining the female while she is sitting on her eggs. Only a small hole is left through which he feeds her.

The great hornbill (*rhinoflax vigil*) flies high over the jungle in a straight line and usually is heard before it is seen, so loud is the noise made by the beating of the wings. Its clamorous call is never to be forgotten, more startling than the laughter of the laughing jackass of Australia. The sound inspires the Dayak with courage and fire. When he takes the young out of the nest, later to serve him as food, the parent bird darts at the intruder. The hornbill is an embodiment of force that may be either beneficent or harmful, and has been appropriated by the

Dayaks to serve various purposes. Wooden images of this bird are put up as guardians, and few designs in textile or basket work are as common as that of the tingang. The handsome tail feathers of the rhinoceros hornbill, with transverse bands of alternate white and black, are highly valued; the warriors attach them to their rattan caps, and from the solid casque with which the beak of the giant species is provided, are carved the large red ear ornaments. Aided by the sumpitan the Dayaks and Punans are expert in bringing down the rather shy birds of the tall trees.

Three hours later we had managed to carry all our goods above the kiham Duyan, which is only one hundred metres long, but with a fall of at least four metres; consequently in its lower part it rushes like a disorderly waterfall. It took the men one and a half hours to pull the empty prahus up along the irregular bank, and I stood on a low rock which protruded above the water below the falls, watching the proceedings with much interest. The day was unusually warm and full of moisture, as, without hat, in the burning sun I tried for over an hour to get snapshots, while two kinds of bees, one very small, persistently clung to my hands, face, and hair.

The journey continued laborious; it consisted mostly in unloading and reloading the prahus and marching through rough country, now on one side of the river, now on the other, where the jungle leeches were very active and the ankles of the men were bleeding. At times the prahus had to be dragged over the big stones that form the banks of the river. It was easy to understand what difficulties and delays might be encountered here in case of much rain. But in spite of a few heavy showers the weather favoured us, and on the last day of the month we had successfully passed the rapids. Next morning, after pulling down my tent, the Penyahbongs placed stray pieces of paper on top of the remaining tent−poles as a sign of joy that the kihams were left behind. There still remained some that were obstinate on account of low water, but with our experience and concerted action those were easily overcome, and early in the afternoon we arrived at Djudjang, a rough, unattractive, and overgrown camp, where I decided to stay until next morning. Many Malays die from beri−beri, but there is little malaria among those who work in the utan of the Busang River. The half dozen men who were present were certainly a strong and healthy−looking lot. One of them, with unusually powerful muscles and short legs, declined to be photographed.

Our next camp was at a pleasant widening of the river with a low−lying, spacious beach of pebbles. I pitched my tent on higher ground on the edge of the jungle. Some of the Penyahbongs, always in good humour and enjoying themselves, went out with sumpitans to hunt pig, and about seven o'clock, on a beautiful starlit night, a big specimen was brought in, which I went to look at. While one man opened it by cutting lengthwise across the ribs, another was engaged taking out the poison−carrying, triangular point. With his knife the latter deftly cut all around the wound, taking out some flesh, and after a little while he found part of the point, then the rest. It looked like glass or flint and had been broken transversely in two; usually it is made of bamboo or other hard wood.

The bladder was carefully cut out, and a man carried it off and threw it away in order that the hunters should not be short of breath when walking. The huge head, about fifty centimetres long, which was bearded and had a large snout, was cut off with part of the neck and carried to one of the camps, with a piece of the liver, which is considered the best part. I had declined it, as the meat of the wild pig is very poor and to my taste repulsive; this old male being also unusually tough, the soldiers complained. The following morning I saw the head and jaws almost entirely untouched, too tough even for the Penyahbongs.

Next day the river ran much narrower and between rocky sides. In the forenoon the first prahu came upon an otter eating a huge fish which the strong animal had dragged up on a rock, and of which the men immediately took possession. It was cut up in bits and distributed among all of them, the otter thus saving the expedition thirty−two rations of dried fish that evening and next morning. To each side of the head was attached a powerful long spine which stood straight out. The natives called the fish kendokat.

At one place where the water ran smoothly, one man from each prahu pulled its rattan rope, the rest poling. I saw the Penyahbong who was dragging my prahu suddenly catch sight of something under the big stones over which he walked, and then he stopped to investigate. From my seat I perceived a yellowish snake about one and a half metres long swimming under and among the stones. A man from the prahu following ours came forward quickly and began to chase it in a most determined manner. With his right hand he caught hold of the tail and twisted it; then, as the body was underneath the junction of two stones, with his left hand he tried to seize the head which emerged on the other side. The snake was lively and bit at his hand furiously, which he did not mind in the least. Others came to his assistance and struck at its head with their paddles, but were unable to accomplish their purpose as it was too well entrenched.

A splendid primitive picture of the savage in pursuit of his dinner, the Penyahbong stood erect with his back

toward me, holding the tail firmly. After a few moments he bent down again trying in vain to get hold of its neck, but not being able to pull the snake out he had to let the dainty morsel go. Later we saw one swimming down the current, which the Penyahbongs evidently also would have liked a trial at had we not already passed the place.

The river widened out again, the rocks on the sides disappeared, and deep pools were passed, though often the water ran very shallow, so the prahus were dragged along with difficulty. Fish were plentiful, some astonishingly large. In leaping for something on the surface they made splashes as if a man had jumped into the water. On the last day, as the morning mist began to rise, our thirty odd men, eager to get home, poling the prahus with long sticks, made a picturesque sight. In early March, after a successful journey, we arrived at Tamaloe, having consumed only fourteen days from Bahandang because weather conditions had been favourable, with no overflow of the river and little rain. It was pleasant to know that the most laborious part of the expedition was over. I put up my tent under a large durian tree, which was then in bloom.

CHAPTER XVII

THE PENYAHBONGS, MEN OF THE WOODS—RHINOCEROS HUNTERS—CHARACTERISTICS OF THE PENYAHBONGS—EASY HOUSEKEEPING—DAILY LIFE—WOMAN'S LOT

The Penyahbongs until lately were nomadic people, roaming about in the nearby Muller mountains, subsisting on wild sago and the chase and cultivating some tobacco. They lived in bark huts on the ground or in trees. Some eight years previous to my visit they were induced by the government to form kampongs and adopt agricultural pursuits, and while most of them appear to be in the western division, two kampongs were formed east of the mountains, the Sabaoi and the Tamaloe, with less than seventy inhabitants altogether. Tamaloe is the name of an antoh (spirit) who lived here in the distant past.

The kampong consists of four small, poorly built communal houses, and of the Malays who have settled here, in houses of their own making, the most important is Bangsul, who married a daughter of Pisha, the Penyahbong chief. Both before and since their transition to sedentary habits the Penyahbongs have been influenced by the Saputans, their nearest neighbours, four days' journey to the north, on the other side of the water−shed. Their ideas about rice culture and the superstitions and festivals attending it, come from the Saputans, of whom also a few live in Tamaloe. They have only recently learned to swim and many do not yet know how to paddle. It may be of some interest to note the usual occurrence of rain at this kampong as gathered from native observation. April−July there is no rain; August−October, little; November and December have a little more; January much; February and March less.

Every evening as long as we remained here Pisha, the chief, used to sing, reciting mythical events, thereby attracting good antohs (spirits) and keeping the evil ones away, to the end that his people might be in good health and protected against misfortune. His efforts certainly were persevering, and he had a good voice that sounded far into the night, but his songs were of such an extraordinarily melancholy character that it still makes me depressed to remember them. He was an amiable man, whose confidence I gained and who cheerfully gave any information I wanted. Of his five daughters and three sons only the youngest daughter, who was not yet married, was allowed to pronounce Pisha's name, according to custom. Nor was it permissible for his sons−in−law to give me the name, still less for him to do so himself.

After Mr. Demmini's departure all the photographing fell upon me, to which I had no objection, but it was out of the question also to do developing, except of the kodak films, and as the lieutenant, who had done some before, thought he could undertake it, the matter was so arranged. The first attempts, while not wholly successful, were not discouraging, and as time went on the lieutenant turned out satisfactory results. We had a couple of days' visit from the kapala of Sebaoi, a tall and nervous−looking Penyahbong, but friendly, as were the rest of them. I was then engaged in photographing and taking anthropometric measurements of the gently protesting natives, to whose primitive minds these operations appear weirdly mysterious. At first the kapala positively declined to take any part in this work, but finally reached the conclusion that he would be measured, but photographed he could not be, because his wife was pregnant. For that reason he also declined a glass of gin which the lieutenant offered him.

The valiant man who had tried to catch the yellow snake on our river voyage called on me with his wife, who knew how to embroider well, and I bought some shirts embellished with realistic representations of animals, etc. The husband had that unsightly skin disease (*tinea imbricata*) that made his body appear to be covered with half−loose fish scales. Next day, to my amazement, he had shed the scales. The previous night he had applied a remedy which made it possible to peel the dead skin off, and his face, chest, and stomach were clean, as were also his legs and arms. His back was still faulty because he had not had enough of the remedy, but he was going to tackle the back that evening. The remedy, which had been taught them by the Saputans, consists of two kinds of bark and the large leaves of a jungle plant with red flowers, one of which was growing near my tent.

All the tribes visited by me suffer more or less from various kinds of skin diseases caused by micro−parasitic animals, the Kenyahs and Oma−Sulings in a much less degree. The most repulsive form, just described, does not seem to interfere with general health. Three of my Kayan carriers thus affected were more muscular and stronger than the rest. One of them was the humorous member of the party, always cutting capers and dancing. Women are

less affected than men, and I often saw men with the disfiguring scaly disease whose wives were evidently perfectly free from it.

A party of six fine−looking Penyahbongs were here on a rhinoceros hunting expedition. They came from the western division, and as the rhino had been nearly exterminated in the mountain ranges west and northwest of Tamaloe, the hunters were going farther east. Such a party carries no provisions, eating sago and animals that they kill. Their weapons are sumpitans and parangs, and equipment for stamping sago forms part of their outfit. The rhino is approached stealthily and the large spear−point on one end of the sumpitan is thrust into its belly. Thus wounded it is quite possible, in the dense jungle, to keep in touch with it, and, according to trustworthy reports, one man alone is able in this way to kill a rhino. It is hunted for the horn, which Chinamen will buy.

At my request two of the hunters gave war−dances very well, taking turns. Their movements were graceful, and in the moonlight they appeared sinuous as serpents. The same dance obtains in all the tribes visited, and the movement is forward and back, or in a circle. It was performed by one man who in a preliminary way exercised the flexible muscles of the whole body, after which he drew his sword, seized the shield which was lying on the ground and continued his dancing more vigorously, but with equal grace. Pisha, the chief, came to the dance, and the meeting with the new arrivals, though silent and undemonstrative, was decidedly affectionate, especially with one of them who was a near relative. Half embracing each other, they stood thus at least a minute.

The Penyahbongs have rather long legs, take long paces, putting down their heels first. They have great endurance and can walk in one day as far as a Malay can in three. In the mountains the cold weather prevented them from sleeping much. It often happened that they were without food for three days, when they would drink water and smoke tobacco. Trees are climbed in the jumping way described before, and without any mechanical aid. Formerly bathing was not customary. Excrements are left on the ground and not in the water. They don't like the colour red, but prefer black. Fire was made by flint and iron, which they procured from the Saputans.

The hair is not cut nor their teeth. The women wear around the head a ring of cloth inside of which are various odoriferous leaves and flowers of doubtful appreciation by civilised olfactory senses. A strong−smelling piece of skin from the civet cat is often attached to this head ornament, which is also favoured by natives on the Mahakam.

In regard to ear ornamentation the Penyahbongs are at least on a par with the most extreme fashions of the Dayaks. The men make three slits in the ear; in the upper part a wooden disk is enclosed, in the middle the tusk of a large species of cat, and in the lobe, which is stretched very long, hangs a brass coil. The ears of the women have only two incisions, the one in the middle part being adorned with bead strings, while in the lobe up to one hundred tin rings may be seen. They are tatued, and noticeable on the men is a succession of stars across the chest, as if hanging on a thread which is lower in the middle. The stars symbolise the fruits of durian. The colour of the tatuing is obtained from damar.

Formerly they wore scanty garments of fibre, the man wearing only a loin cloth, and in case of cold weather a piece of the same material covered the shoulders and back. The woman had a short skirt folded together at the back, and both sexes used rattan caps. Besides sago their main subsistence was, and still is, all kinds of animals, including carnivorous, monkeys, bears, snakes, etc. The gall and urine bladder were universally thrown away, but at present these organs from bear and large snakes are sold to traders who dispose of them to Chinamen. Formerly these people had no salt.

No cooking utensils were employed. Sago was wrapped in leaves and placed on the fire, and the meat was roasted. There is no cooking separately for men and women, and meals are taken irregularly, but usually twice a day. The crocodile is not eaten, because it would make one mad, nor are domestic dogs or omen birds used for food. Honey is collected by cutting down the tree. Their principal weapon is the sumpitan, which, as usual, with a spear point lashed to one end, also serves as spear and is bought from the Saputans. Parang and shield complete the man's outfit. On the Busang only ten ipoh (upas) trees are known from which poison may be obtained for the blow−pipe darts; to get a new supply a journey of two days down the river is necessary, and six for the return.

Except for a few cases of malaria, among the Penyahbongs there is no disease. In 1911 the cholera epidemic reached them, as well as the Saputans. Of remedies they have none. At the sight of either of the two species of venomous snakes of the king cobra family this native takes to his heels, and if bitten the wound is not treated with ipoh. Until recently they had no blians; there were, at this time, two in Tamaloe, one Saputan and one Malay, and the one in the other kampong learned his art from the Saputans. One man does not kill another, though he may kill a member of the Bukat tribe, neighbouring nomads who live in the northeast of the western division, in the

mountains toward Sarawak. Suicide is unknown. It was asserted to me that the Penyahbongs do not steal nor lie, though I found the Saputans untrustworthy in these respects.

There is no marriage ceremony, but the young man must pay the parents of the bride one gong (f. 30), and if the girl is the daughter of a chief her price is six gongs. About half of the men select very youthful wives, from eight years up. There are boys of ten married to girls of a similar age. One boy of fourteen was married to a girl of twenty. Children of the chief being much sought, one of Pisha's daughters, twenty−three years old, had been disposed of when she was at her mother's breast, her future husband being twenty at that time. Upon reaching womanhood she did not like him at first, and for five years declined to share the mat with him. Recently, however, she had begun to associate with him, and they had one child. The children are not beaten, are left to pick up by themselves whatever knowledge is necessary, and when the boy is ten years old he can kill his babi with a sumpitan. The parents of young girls do not allow them to be too intimate with young men.

A pregnant woman must not eat durian which, in falling from the tree, has broken, or stuck in a cleft without reaching the ground, nor any kind of fruit that does not fall straight to earth, nor sago from a palm tree which chanced to become entangled by a branch instead of falling directly to the ground, nor the large hornbill, nor snakes, nor pigs, nor fish that were killed by being struck on the head, or by any other means than with spear or parang, nor land turtle, nor the scaly ant−eater. She must not make a house or take part in making it, and therefore if a pole has to be put in place she must call another woman to do it.

Further, she must not eat an animal which has lost one or both eyes, nor one the foot of which has been crushed, nor an animal of strong odour (like civet cat, skunk, etc., not an offensive smell to these natives); nor are she and her husband permitted to gather rubber, nor may wood be gathered for fire−making which has roads on it made by ants. She must not drink water from a back current, nor water which runs through a fallen tree. A pig may be eaten, but if it has a foetus inside that must be avoided. The husband also observes all these tabus and precautions.

The Penyahbongs rise before dawn. Fire is made, primitive man's greatest comfort, and they seat themselves before it awaiting daylight, the woman brings her child near it, and all smoke strong native tobacco. Without first eating, the man goes out to hunt for animals, usually alone, but if two or three go together they later separate. The hunter leaves his parang at home, taking only the sumpitan. He may not return until the afternoon. Small game he carries home himself, but when a large animal has been killed, as wild pig, deer, bear, large monkey, he will leave it in the utan for his wife to bring home. In case of a rhino being slain he will remove the horn, but the woman will cut up the animal and take it home, unless it is too late, when she postpones the task until the next morning.

The husband is fond of singing, and, accompanying himself by striking the rattan strings attached to the back of a shield, he may occupy himself in this way until the small hours of the morning. Women make mats in the evening, or do work of some kind, and the young people may play and sing for a while, or they may listen to the singing of the lord of the household; but gradually all go to sleep except the wife.

Besides the small knife for splitting rattan, which is the special implement of the Dayak woman, the fair sex of the Penyahbongs has a parang, a spear, an axe, a bone implement used in working rattan mats, and a rattan bag which is carried on the back. The women in several Dayak tribes also possess such feminine accessories. With the Penyahbongs the male chiefly hunts, the female doing all the work. She makes the house, cuts the sago palm, and prepares the sago. When setting forth to bring home the animal killed by her husband she carries her own parang with which to cut it up, placing it inside the rattan bag on her back. With one or two other women she may go out with the dogs to kill wild pigs with a spear. When searching for the many kinds of fruit found in the utan her own axe is carried with which to cut the tree down, for she never climbs to pick the fruit. As for the durian, she waits until it falls ripe to the ground. The woman also brings water and firewood, does all the cooking, and then calls her husband that he may eat. Basketry is not known, but the rattan mat and the mat of palm leaves on which these natives sleep are nicely made by the women, who also manufacture the large mat on which the stamping of sago, by human feet, is performed. In changing abode women carry everything, the men conveying only the sumpitan and the darts, probably also a child that is big enough to walk, but the small child the woman always carries. If the men go to war the women remain behind and defend themselves if attacked.

Although the woman thus bears an absurdly large share of the family burden, nevertheless it cannot be said that her lot is an unhappy one, because she is not the slave of the man, as is the case, for instance, with the Australian savages. From time immemorial their society has known no other conditions, and the married couples

are generally happy. Both of them treat their children with affection, and though the husband may become angry, he only uses his tongue, never strikes her, and he has no polygamous inclinations. Divorces, though permissible, do not occur, because there is a natural feeling against illicit relations with the husband or wife of another. Moreover, the rest of the community would resent it. Bangsul, who had been there seven years, had never heard of divorce.

When a man is near death his family and others gather around him to see him die, but without attempt to restore him to health. When dead his eyes are closed, he is washed, and a new chavat of fibre as well as a new shirt of the same material is given him. Tobacco is put in his mouth, four cigarettes on his abdomen, and on his chest and stomach are placed sago and cooked wild pig or some other meat for him to eat. Four bamboos filled with water are set upright near by. His sumpitan with its darts, poison for the darts, the parang, shield, and his musical instruments if he has any—in short, one sample of everything he had is laid down by his side. What little else may be left goes to the widow. When a woman dies she is treated in the same way, but the nose flute is the only instrument that accompanies her.

A tree is cut down and from the log a dugout is made in which the corpse is placed, a board being loosely fastened as a cover. This coffin is placed on a simple platform in the utan. There is no feast attending this rite. I visited the burial−place (taaran) of Tamaloe on the other side of the river about a kilometre away. It was difficult to find, for the small space which is cleared of jungle whenever there is a funeral very soon grows up again. Only two boxes, each containing the corpse of a child, were in good condition, the rest having fallen down and disappeared through the action of rains and wild pigs.

After the husband's death the widow eats only every second day for a month; after that she is free to eat, but for a year she weeps twice a day, morning and evening,—though sometimes she forgets. The father, mother, and sister of the deceased also take part in the one−year period of wailing twice a day. After that period has elapsed the widow may remarry. For the widower there are practically the same regulations, though he does not weep loudly, and after eight months he can look for another wife; but first he must have taken a head.

CHAPTER XVIII

A STRANGE MAMMAL—ANIMAL LIFE IN CENTRAL BORNEO—A SUPERB AND SILENT REALM—VISIT TO A SALT WATER EXUDATION—PASSING THE DIVIDING RIDGE—A MOUSE−DEER CHASE—ON THE KASAO RIVER

I was planning a visit to the headwaters of the Busang River, to be made in connection with our future journey. Few natives, if any, have entered that region, which was described as very mountainous, though the mountains cannot be very high. But all who were approached on the subject, whether Penyahbong or Malay, absolutely declined to take part in an expedition to that country, because they would be killed by an animal called nundun, which is very numerous there. They might be able to tackle one, they said, but as soon as you encounter one there are hundreds more coming for you, and there is nothing else to do but to run for your life. Those regions, although known to be rich in rubber trees, are shunned by all natives. Unless this is an altogether fabulous animal, which is hardly likely to be the case, because the Punans and Bukats confirmed its existence, it would appear to be a kind of bear which perhaps in fruit seasons gathers in great numbers, and which is ferocious.

Nundun, in Penyahbong and Bukat called bohang (bear), is said to run faster than a dog, is killed with the sumpitan at twenty to thirty metres distance, and is eaten. It is further declared that its habitat extends through the hilly regions between the headwaters of the Busang River and the Upper Barito, and that it is especially numerous near the kampong Kelasin. If any one with the hope of possibly finding a new species of mammal should care to follow the matter up, Kelasin on the Upper Barito would not be an extremely difficult place to reach, with good men. Both the lieutenant and I, having so many rifles, were much inclined to defy the terrors of the nundun, but desirable as this expedition would have been, it had to be given up because of the formidable difficulties in getting men, even if we followed the route over the watershed which is used by the natives.

Bangsul had undertaken to negotiate with us on behalf of the Penyahbongs and the Malays, and although in some ways he was an estimable man, his Malay characteristic of turning everything to his own advantage at times got the better of him and delayed an agreement. At first they demanded a sum amounting to seven florins a day for each of the twenty−nine men needed, but as fourteen Malay rubber−gatherers arrived very opportunely, it was agreed that we should be taken to the Kasao River for 300 florins and my six prahus. The natives had some trouble deciding how the prahus should be divided among them, the kapala insisting upon having the largest and best for himself.

This question having been settled through Bangsul, on March 22 we departed. Our prahus were poled most of the way on a stream which, though rather shallow, ran with a swift current, and at times made my heavily loaded craft take water. In Borneo it usually requires as many days to get up−stream as it takes hours to come down.

We stayed for the night at a former camping place of rattan seekers, a small, narrow clearing on the river brink, on which tents and sheds were huddled closely together in the way military men prefer when travelling in the utan. The paddlers had asked us to be ready at daylight, but at seven o'clock in the chilly and very foggy morning they were still warming themselves around the fire. An hour later, when we had finished loading the prahus, the river began to rise incredibly fast, at the rate of ten centimetres per minute in the first six minutes, and in two hours and a quarter it had risen 2.30 metres, when it became steady. In the meantime we had remade our camp, hoping that the river might permit us to travel next day. Three of the Penyahbongs went out hunting with the only sumpitan we had, and shortly afterward returned with a pig.

Early in the afternoon we were much surprised by the appearance of a prahu with three Dayaks who had a dog and a sumpitan and brought a pig which they had killed in the morning. They were the chief, with two companions, from Data Laong on the Kasao River for which we were aiming. The rumour of our party had reached his ears, and with thirty men he had been waiting for us on this side of the watershed. Their scanty provisions soon ran out, and after waiting nine days all had returned home except the present party, whom we welcomed. The new men proved a valuable addition to our crew. The kapala, who was attached to my prahu, was active and gave his orders as if he knew how, a great relief from a weak Malay that hitherto had been at “the helm.” When the men with the poles were unable to move the boat against the current, the small, but strongly built man, with a few very powerful pushes, would bring it forward, making it vibrate by his strength.

At Tamaloe animals and birds were not plentiful, the call of the wah−wah usually imparting a little life to the mornings; and I once heard a crow. I do not remember to have seen on the whole Busang River the most familiar of all birds on the Bornean rivers, an ordinary sandpiper that flits before you on the beach. Birds singing in the morning are always rare except in the localities of paddi fields. The one most likely to attract attention on a forenoon is the giant hornbill, and as we advanced up the Busang its laugh might still be heard. Much more unusual was the call of some lonely argus pheasant or a crow. A few of the beautiful white raja birds were observed.

Wild pigs and deer continued plentiful, but the monkeys seemed gradually to disappear. Fish there were in plenty, but they were now of smaller kinds, not agreeable to eat, having an oily taste and mostly very bony. At all our camping places ants of various kinds were numerous, also inside of the tent, but they did not seem to be obnoxious. Just before sunset the loud voices of the cicadas began, and after dark lovely moths were attracted by my lamp, while during the night bats flew in and out of my tent. The humidity of the atmosphere was great. Safety matches would not strike fire unless kept in an airtight box. My cameras were inside of solid steel boxes, provided with rubber bands against the covers, making them water−tight. Nevertheless, upon opening one that had been closed for three weeks the camera inside was found to be white with mould.

It was rough and hard travelling on account of incessant low kihams to be passed, or banks of small stones over which the prahus had to be dragged. The Penyahbongs had not yet learned to be good boatmen, often nearly upsetting the prahu when getting in or out. Occasionally long quiet pools occurred, and the scenery here was grand and thrilling. Graceful trees of infinite variety bent over the water, bearing orchids of various colours, while creepers hung down everywhere, all reflected in a calm surface which seldom is disturbed by the splashing of fish. The orchids were more numerous than I had ever seen before. A delicate yellow one, growing in spikes, had a most unusual aromatic fragrance, as if coming from another world.

In the morning a curtain of fog lies over the landscape, but about nine o'clock it begins to lift, and creeping up over the tree−tops gradually dissolves in the sun−light, while between the trees that border the river the deep−blue sky appears, with beautiful small cumulus clouds suspended in the atmosphere. With the exception, perhaps, of a large blue kingfisher sitting in solitary state on a branch extending over the water, or a distant hornbill with its cheerful grandiose laugh, there are no evidences of animal life, nevertheless the exquisite scenery seems to lure the beholder on and on. To pass through this superb and silent realm was like a pleasant dream. There are no mosquitoes and consequently no malaria.

We were progressing through a country of which little is known accurately beyond its somewhat hilly character, and the fact that it is uninhabited except for small transient parties of Malays searching for rattan or rubber. The upper part of our route to the divide, a comparatively short distance, had not, to my knowledge, been traversed by white men before. Errors were corrected on the map of the watershed region.

One day at noon, while we were waiting for the largest prahu to overtake us, fresh tracks of pig were discovered on the bank, and the Saputan dog, a very wise animal, was landed. A few minutes later he began the peculiar barking which indicated that he had caught the scent, and one man seized a sumpitan and ran off into the utan as fast as his legs could carry him, holding the weapon in his right hand in a horizontal position, spear end first. It sounded as if the dog might be holding the pig in the water a little higher up, but this was soon found to be a mistake when the barking was heard close by. The Saputan kapala then jumped from my prahu, drew his parang, and with wonderful elastic movements disappeared in the utan. Two or three minutes later they returned, one man bearing in his arms a scarcely half−grown live pig, which had been hit by the sumpitan. The whole affair lasted barely ten minutes.

At another place, where we were again waiting for the big prahu, the Penyahbongs amused themselves with wrestling in water up to their shoulders. After some dancing around, the fight would invariably finish by both disappearing and after a few seconds coming to view again. This caused much merriment, especially to the wrestlers themselves, who laughed immoderately when reappearing.

We entered the tributary Bulau, and a couple of hours later arrived at its junction with Bakkaang, at the source of which we expected to cross the watershed. The river, which was rather narrow, would be difficult to ascend unless we had showers. Luckily rain fell during the night, and although delayed by trees that had fallen across the stream, which was from six to ten metres wide, we made a good day's work and camped at an attractive old clearing of rattan gatherers.

I spent the next forenoon in an excursion to a place within the jungle, where birds and animals sometimes congregate in great numbers to obtain the salt water which issues from the earth or rocks. This masin (salt water) was known to the Malay rattan seekers in our party, who had snared birds and deer there. In the dry season hundreds of birds of various kinds would gather. By wading up a small stream for twenty minutes we reached a place where water exuded from a rock, especially at its top, and by following the stream upward for another twenty minutes we arrived at the larger one, where the ooze from the rocks overflowed the ground. Only tracks were seen, but our guide said that after three rainless days in succession birds and animals would be sure to come there. Myriads of yellowish−gray flies covered the ground as well as the rocks, and after having taken some specimens of algae, also some white gelatinous stuff with which the Malays rub themselves when afflicted with beri−beri, I returned to camp.

In spite of frequent light showers the stream failed to rise appreciably, and our goods had to be carried on the back of the men to our next camping place. The following morning we started in a heavy rain at which we rejoiced, because it enabled us to use our prahus until we reached the foot of the dividing ridge. At noon we arrived in camp, with our clothing thoroughly wet. What the downpour might have left intact the Penyahbongs, forgetting everything but the safety of the prahus, had done their best to drench by splashing water all the time. Just as we had made camp the rain ceased and with it, being near the source of the stream, the overflow too passed away. In dry weather it would be a tedious trip to get up the Bakkaang.

For two days we were busy carrying our goods to the top of the ridge. Neither the Malays nor the Penyahbongs are very strong carriers, and they complained of being stenga mati (half dead) from their exertions. On the third day, when the ascent was to be finished, eight of them complained of being sakit (sick) or played out, and they looked it. Fortunately the Saputan chief, who a few days previously had left us to procure more men, returned with four companions, who came in very opportunely. The ascent is neither long nor difficult, a seldom used path leading across the ridge at the most convenient place. The elevation above sea level, taken April 2, by boiling point thermometer, was 425 metres (1,394.38 feet), and the ridge seemed to run evenly to either side. The space for a camp was somewhat cramped, and the small yellow bees that are so persistent in clinging to one's face and hands were very numerous; they will sting if irritated. Even the lieutenant, ordinarily impervious to that kind of annoyance, sought the protection of his mosquito net.

The calls of argus pheasant and wah−wah next morning sounded familiar. The north side of the Bukit, or mountain (the name applied by the natives to the ridge), is steeper and rougher than the south side, but the descent presents no difficulties. We followed the small river Brani, most of the time wading it. The distance to the junction of the Brani with the Kasao River [*] is hardly five hours' walking, but copious showers, which at times changed the river to a torrential stream, interfered with the transportation of our goods, which required five days.

[Footnote *: Kasao is the Malay name. The Saputans call the river Katju.]

Our friend, the Saputan chief, had materially assisted us, and he was desired to walk down to his kampong—by boat only an hour's journey on the swift current—and bring men and prahus to take us away. He was very willing and exceedingly efficient, but he was also, in his childish way, intent on making as much out of us as possible. He wanted to bring too many prahus and men, for all the male population of the kampong were anxious to get this job, he said. I made him a fair offer, and three times he came to tell me that he still had to think over it. Finally, after three hours' deliberation, he accepted my proposition—provided I would pay for two days instead of one! In order to get action, and considering all the days they voluntarily had waited for us at the ridge, I acceded to this amendment and he went away happy.

The men and the prahus came promptly and we began loading; I was glad at the prospect of getting away from the low−lying country, where we had our camp among bamboo trees, with the chance of being flooded should the river rise too high. As we were standing near my tent, getting ready to take it down, a plandok (mouse−deer, *tragulus*) came along—among the Saputans, and probably most Dayaks, reputed to be the wisest and most cunning of all animals, and in folklore playing the part of our fox. It was conspicuously pregnant and passed unconcernedly just back of the tent. As the flesh is a favourite food of both Dayaks and Malays they immediately gave chase, shouting and trying to surround it, which made the plandok turn back; then the wonderfully agile Saputan chief darted after it and actually caught it alive. Extraordinary agility is characteristic of most Dayaks. An army officer in his report of the Katingans describes how a Dayak “suddenly jumped overboard, drew his parang, and with one stroke cut a fish through the middle. Before we knew what had happened the material for our supper

was on board."

After a pleasant drifting down the current of the Kasao River, about noon on April 7 we arrived at Data Laong, a Saputan kampong consisting of three small communal houses. On the river bank a small space had been cleared of grass for my tent. The people seemed very amenable to my purposes and there was a primitive atmosphere at the place. We had used seventeen days from Tamaloe, much in excess of the time calculated, but under unfavourable circumstances we might easily have used double. There was reason to be satisfied at arriving here safely without having incurred any losses. We could look forward with confidence to the remainder of the journey, mainly down the great Mahakam River, toward distant Samarinda, because the Dayaks along the route were very numerous and had plenty of prahus.

CHAPTER XIX

THE SAPUTANS—HOW THE EARS OF THE CHIEF WERE PIERCED—AN UNEXPECTED ATTACK OF FILARIASIS—DEPARTURE FROM THE SAPUTANS—DOWN THE KASAO RIVER—"TOBOGGANING" THE KIHAMS

The Penyahbongs, men of the jungle, who left us to return home, had not proved such good workers as the Saputans, who, though in a pronounced degree smaller, mostly below medium size, are very strongly built. The first named, nevertheless, are their superiors both physically and morally. The more homely−looking Saputans, though friendly and willing to assist you, try to gain an advantage in bargaining. They set high prices on all things purchased from them and cheat if permitted to do so. Although no case of actual stealing came to my notice, they are dishonest, untruthful, and less intelligent than the tribes hitherto met. The chiefs from two neighbouring kampongs paid us visits, and they and their men made a somewhat better impression, besides having less skin disease.

The Saputans are a crude and somewhat coarse people who formerly lived in caves in the mountains further east, between the Mahakam and the Murung (Barito) Rivers, and migrated here less than a hundred years ago. Lidju, a Long−Glat raja from Batokelau, who at one time was my interpreter and assistant, told me that the Saputans had made a contract with his grandfather to take them to the Kasao. This report was confirmed by the kapala of Batokelau. The Saputans probably do not number over 500 all told.

The custom of cutting the teeth, eight in upper front and six in the lower jaw, is observed to some extent, but is not regularly practised. Both sexes have shrill, sharp voices. The men admire women who have long hair, light yellow skin, and long extension of the ear−lobes. The women like men to be strong and brave on headhunting expeditions. Suicide is very rare. They may use ipoh or tuba for the purpose. All animals are eaten without restriction. The men are good hunters and know how to kill the tiger−cat with sumpitan or spear. They also make good, large mats from split rattan, which are spread on the floor, partly covering it. The women make mats from palm leaves, and when the Saputans are preparing for the night's rest the latter kind is unrolled over the rattan variety. Formerly sumpitans were made in sufficient number, but the art of the blacksmith has almost died out, only one remaining at the present time, and most of the sumpitans are bought from the Bukats on the Mahakam River.

There appear to be more men than women in the tribe. Children are wanted, and though the usual number in a family is four, sometimes there is only one. There are no restrictions in diet for a pregnant woman beyond the prohibition of eating of other people's food.

Only when the chief has a wedding is there any festival, which consists in eating. There is no marriage ceremony, but having secured the girl's consent and paid her father and mother the young man simply goes to her mat. They then remain two days in the house, because they are afraid of the omen birds. On the third day both go to fetch water from the river and she begins to husk rice. Monogamy is practised, only the chief being allowed to have five or more wives. The very enterprising kapala of Data Laong, to the displeasure of his first wife, recently had acquired a second, the daughter of a Penihing chief. While the payment of a parang may be sufficient to secure a wife from among the kampong people, a chiefs daughter is worth ten gongs, and in order to raise the money necessary to obtain the gongs he set all the men of the kampong to work, gathering rattan, for one month. Though each of them received something for his labour, it was less than one−fourth of the amount accruing from the sale of the product, leaving him sufficient to pay the price demanded for the new bride. In Long Iram a gong may be bought for f. 30−80, and for purposes of comparison the fact is mentioned that a Malay usually is required to pay f. 60 to the girl's father to insure his consent to the marriage.

April was rainy, with frequent showers day and night, and thunder was heard every evening. Life there was the same as in most Dayak kampongs, nearly all the people being absent during the day at the ladangs, and in the evening they bring home the roots of the calladium, or other edible roots and plants, which are cooked for food. The paddi had been harvested, but the crop was poor, and therefore they had made no feast. There is no dancing here except war dances. For a generation they have been gathering rubber, taking it far down the Mahakam to be sold. Of late years rubber has nearly disappeared in these parts, so they have turned their attention to rattan.

One day a man was seen running with a sumpitan after a dog that had hydrophobia, and which repeatedly passed my tent. The apparent attempt to kill the animal was not genuine. He was vainly trying to catch it that he might tie its legs and throw it into the river, because the people believe that the shedding of a dog's blood would surely result in misfortune to their health or crops. After three days the dog disappeared.

In Data Laong few were those men, women, and children who had not some form of the skin diseases usual among the Dayaks, which were rendered still more repugnant by their habit of scratching until the skin bleeds. A man and wife whose skin looked dry and dead, the whole body exhibiting a whitish colour, one day came to my tent. Standing, or crouching, before the tent opening they formed a most offensive picture, vigorously scratching themselves, while particles of dead skin dropped in such quantity that after some minutes the ground actually showed an accumulation resembling snow. They were accompanied by a twelve−year−old daughter who, strange to say, had a perfectly clean skin.

The belief about disease and its cure is identical with that of other tribes I have met. The evil antohs are believed to be very numerous in the mountainous region at the headwaters of the Kasao River, from whence they visit the kampongs, though only the blians are able to see them. The dead person is given new garments and the body is placed in a wooden box made of boards tied together, which is carried to a cave in the mountains, three days' travel from Data Laong. There are many caves on the steep mountain−side and each kampong has its own.

The Saputans were shy about being photographed, but their objections could be overcome by payments of coin. The kapala, always alive to the value of money, set the example by consenting to pose with his family for a consideration of one florin to each. But the risks incurred, of the usual kinds hitherto described, were believed to be so great that even the sum of ten florins was asked as reward in the case of a single man. A prominent man from another kampong was preparing to make holes through the ears of the kapala, and for a compensation I was permitted to photograph the operation, which is an important one. It is the privilege of chiefs and men who have taken heads to wear a tiger−cat's corner tooth inserted in a hole in the upper part of each ear. The operation must not be performed when the man in question has a small child.

Surrounded by four men, the kapala seated himself on the stump of a tree. The hair was first cut away above the ears, a long board was placed upright behind and against his right ear, and the operator adjusted his tool—an empty rifle cartridge of small calibre, which was encased in the end of a small piece of wood. After having carefully ascertained that all was in order he struck the tool, using a loose axe−head with sure hand, two or three times. The supporting board was removed and a bamboo cylinder of exactly the same size as the empty cartridge, which was held in readiness, was immediately put into the hole. The round piece of cartilage which had been cut out was taken care of, lest it be eaten by a dog and cause illness. Blood streamed profusely from the ear, and, strange to tell, the robust man looked as if he were going to faint. The four assistants closed round him, stroking his arms, and he attempted to rise, but had to resume his seat.

Usually nothing untoward happens at such operations, but in this case an evil antoh had taken possession of the kapala and was eating blood from the wound. The principal blian was hastily sent for, and arriving promptly, proceeded to relieve the suffering kapala. He clapped his hands over the ear, and, withdrawing, opened them twice in quick succession, then, after a similar third effort, a fair−sized stone (less than a centimetre in diameter) was produced and thrown into the river. Slight rain began to fall, and the scene was brought to a dramatic conclusion by the exhausted chief being ignominiously carried away on the back of a strong young man. At the house another stone was produced by the same sleight−of−hand, but more strenuous measures had to be adopted in order to remedy the uncanny incident.

A pig was brought up into the room, where blood from its throat was collected. Part of it was smeared on the kapala, and part was mixed with uncooked rice as a sacrifice to some good antoh, who is called upon to drive the evil one away. Outside on the river bank four stalks of bamboo, which had branches and leaves at the top, were placed in a slanting position. From the stems of these were hung two diminutive bamboo receptacles made in the form of square, stiff mats, on which was placed the mixture of rice and blood for the antoh to eat. Also suspended were two short pieces of bamboo cut open lengthwise so as to form two small troughs, into which a little blood was poured for the same supernatural power to drink.

When all this had been made ready the old blian, accompanied by two young pupils, took position before the sacrifice. For about ten minutes he spoke, with his face to the south, requesting a good antoh to come and the evil one to depart, after which he, the young men, and the kapala, who stood near, all repeatedly threw up rice in a

southerly direction. This was done in expectation that the good antoh, having eaten of the sacrifice, would feel disposed to drive the bad one away.

In the middle of April I was seized with an attack of filariasis, a disorder caused by the sting of a certain kind of mosquito. During the day I had felt pain in the glands of the loins, which were swollen, without giving the matter any particular attention. As I am not in the habit of being ill, in fact, so far had prided myself on growing younger each year, this experience of suddenly becoming very weak and miserable was most unexpected. Vomiting set in, so I went immediately to bed, and slept soundly during the night and also most of the next day, when I found myself with an extremely high fever, much more severe than that which accompanies malaria, a pernicious form of which I once passed through on the west coast of Mexico. Until many months afterward I did not know the nature of my disorder, but resorted to the simple remedy always available—to stop eating, as Japanese soldiers are reported to do when wounded. On the fourth day the fever abated, after which improvement was rapid. Two days later my general condition was fair, although the lower part of the right leg, especially about the ankle, was red and swollen. I soon felt completely restored in spite of the fact that a painless swelling of the ankle remained.

Two months later I had another attack, as sudden and unexpected as the first. This was ushered in by a chill exactly like that preceding malaria, but the fever that followed was less severe than on the former occasion, and in a few days I was well again.

More than a year afterward hypodermic injections of sodium cacodylate were attempted with apparent success, though the swellings continued. Many months later an improvement in the condition of the leg was gradually brought about, to which perhaps a liberal consumption of oranges separate from meals, largely contributed. This affection is not common in Borneo. A native authority in Kasungan, on the Katingan River in South Borneo, himself a Kahayan, told me of a remedy by which he and eight other natives had been completely cured. It is a diffusion from three kinds of plants, applied externally, samples of which I took.

On the last day of April we were able to continue our journey down the Kasao River, in seven prahus with twenty−eight men, twenty−four of whom were Penihings, who, with their raja, as the chiefs are called on the Mahakam, had arrived from below by appointment. Owing to my recent distressing experience I was not sorry to say farewell to Data Laong, where the women and children were afraid of me to the last, on account of my desire to have them photographed. The Saputans are kind, but their intellect is of a low order, and the unusual prevalence of skin disease renders them unattractive though always interesting subjects.

A glorious morning! The river, running high and of a dirty yellowish−green colour, carried us swiftly with the current in the cool atmosphere of the morning mist which the sun gradually cleared away. Repeatedly, though for a few moments only, an enchanting fragrance was wafted to me from large, funnel−shaped, fleshy white flowers with violet longitudinal stripes that covered one of the numerous varieties of trees on our way. Many blossoms had fallen into the water and floated on the current with us. It was a pleasure to have again real Dayak paddlers, which I had not had since my travels in the Bultmgan.

We dashed through the tall waves of many smaller rapids and suddenly, while I was having breakfast, which to save time is always taken in the prahus, I found myself near what appeared to be a rapidly declining kiham. A fathomless abyss seemed yawning before us, although the approach thereto was enticing, as the rushing waters turned into white foam and played in the strong sunlight. We passed a timid prahu which was waiting at one side of the course, but had I desired to do so there was no time to stop my prahu. That might have meant calamity, for we were already within a few seconds of the rushing, turbulent waters. So down we went, with a delightful sensation of dancing, falling water, strong sunlight, and the indescribable freshness and swiftness of it all. The Penihing at the bow looked back at me and nodded with a satisfied expression on his countenance, as if to say: “That was well done.”

There were kihams after kihams to be passed; at one place where the rapids were long, from twelve to eighteen men helped to direct each prahu with rattan ropes, preventing it from going where the water was deep and the waves ran high. But my men, who appeared to be skilful, evidently decided not to depend on the rattan but steered deliberately out into the deep water; the prahu began to move swiftly, and, tossed by the big waves, the large tins and boxes were shaken about and threatened to fall overboard. The bundle of one of the Dayaks actually dropped into the water. There were only four men in the prahu, and the one at the bow, on whom so much depends for safety, seeing that it was his bundle, immediately jumped after it, leaving the boat to its fate. Luckily

there was no reason for the others to do likewise, and I escaped with drenched legs and a wet kodak.

New kihams soon compelled us to take out half the load and make double trips, which proved slow and tedious work. I sat on the rocks waiting, and ate luncheon, which consisted of one small tin of macquerel in oil, put up in France, very convenient for travelling. In front of me on the other side of the river a lonely Malay was working eagerly, trying to float a big bundle of rattan which had lodged in the midst of a waterfall against a large stone, and which finally he succeeded in loosening. Suddenly it floated, and as suddenly he leaped upon it, riding astride it down the foaming waters.

The prospect for some smooth sailing now appeared favourable, but scarcely had I made myself comfortable, lying down in my prahu, before I was drenched by furious waves into which we had plunged. We soon got out of them, however, and continued our swift travel downward. In the distance most of our prahus could be seen in a calm inlet on the other side, where Mr. Loing was awaiting our arrival; but my men continued on their course. In a few seconds we entered the boiling waves of the rapids, down which we went at thrilling speed. We literally jumped a small waterfall, then, sharply turning to the left, passed another. More than a third of the boat was in the air as we leaped over it. The Dayaks stand in the prahu and every nerve is at full tension. The man at the bow shouts and warns. They are daring, but manage to avoid the hidden rocks with which the course of the river is studded, now steering slightly to the left, now more to the right. Thirty or fifty centimetres one way or the other may make all the difference between safety and disaster. Three men in a small prahu which follows immediately behind, seeing that they cannot avoid dashing against a rock, jump overboard, pull the boat out of its course, and save it.

Ahead was another turn in the river where the third kiham in succession awaited us, and after some moments of comparative quiet we again dashed down into turbulent waves, and making a swift turn to the right on a downward grade glided into smoother waters. The excitement was over and the experience had been as delightful as it was unexpected. It reminded one of tobogganing in Norway and was great fun, although the enjoyment was always mingled with feelings of anxiety concerning the cameras and instruments.

The luggage was unloaded from the prahus which were waiting at the head of the last rapids, and was carried on the backs of natives who afterward took the empty boats down. Although the men had worked incessantly for nine hours, on the advice of the chief it was decided to proceed to Samariting, the first Penihing kampong. Half the goods was stored near the beach, to be called for the following day, and the now comfortably loaded prahus made ready for the descent of the next rapids, which he said were risky. He therefore was going to walk himself and advised us to do likewise. Rain began to fall. On the high river bank I waited to see them off. The first prahu had to return and take another course; the men all seemed to be hesitating. Finally it made a fresh dash forward. Near the end of the long rapids it almost disappeared from view, appeared again, steering first to right then rapidly to left again. There was the dangerous place, and having in this manner seen most of them pass successfully, I walked on and shortly afterward boarded my prahu, which carried us swiftly down to Samariting.

The river bank on which the kampong is built is lower than usual, and the place is clean and attractive. All the people look strikingly more healthy than the Saputans, and I saw a few very nice−looking young girls. The men swarmed round me like bees, all wanting in a most amiable way to help put up my tent. During the day I had lost the cover of my red kettle—annoying enough when it cannot by any means be replaced—but even a more serious loss would have been compensated by the delightful experience of the day, which was without other mishaps.

Our goods having been safely brought in, the next day about noon we started in fully loaded prahus. All went well with the exception of one of the smaller boats which, timidly working down along the bank, suddenly turned over and subsided on a rock. The men did their best to save the contents, the rapid current making it impossible for us to stop until we were a hundred metres further down, where the Dayaks made ready to gether up boxes and other articles that came floating on the current. Nothing was lost, but everything got wet.

CHAPTER XX

ARRIVAL ON THE MAHAKAM RIVER—AMONG THE PENIHINGS—LONG KAI, A PLEASANT PLACE—A BLIANAS SHIELD—PUNANS AND BUKATS, SIMPLE−MINDED NOMADS—EXTREME PENALTY FOR UNFAITHFULNESS—LONG TJEHAN

A few minutes later we came in sight of the Mahakam River. At this point it is only forty to fifty metres wide, and the placid stream presented a fine view, with surrounding hills in the distance. In the region of the Upper Mahakam River, above the rapids, where we had now arrived, it is estimated there are living nearly 10,000 Dayaks of various tribes, recognised under the general name Bahau, which they also employ themselves, besides their tribal names.

The first European to enter the Mahakam district was the Dutch ethnologist, Doctor A.W. Nieuwenhuis, at the end of the last century. He came from the West, and in addition to scientific research his mission was political, seeking by peaceful means to win the natives to Dutch allegiance. In this he succeeded, though not without difficulty and danger. Although he was considerate and generous, the Penihing chief Blarey, apprehensive of coming evil, twice tried to kill him, a fact of which the doctor probably was not aware at the time. Kwing Iran, the extraordinary Kayan chief, knew of it and evidently prevented the plan from being executed. Blarey did not like to have Europeans come to that country, which belonged to the natives, as he expressed it.

The Penihing kampong, Sungei Lobang, was soon reached. It is newly made, in accordance with the habit of the Dayaks to change the location of their villages every fourteen or fifteen years, and lies on a high bank, or rather a mud−ridge, which falls steeply down on all sides. It was the residence of the chief and the Penihings who brought us here, and if conditions proved favourable I was prepared to make a stay of several weeks in this populous kampong, which consists of several long, well−constructed buildings. The Dayaks assisted in putting up my tent, and of their own accord made a low palisade of bamboo sticks all around it as protection against the roaming pigs and dogs of the place. It proved of excellent service, also keeping away the obnoxious fowls, and during the remainder of my travels this measure of security, which I adopted, added considerably to my comfort. On receiving their payment in the evening the Dayaks went away in bad humour because they had expected that such a tuan besar as I was would give them more than the usual wages allowed when serving the Company, as the government is called. This tuan, they said, had plenty of money to boang (throw) away, and he had also a good heart.

Otherwise, however, these natives were kindly disposed and more attractive than either of the two tribes last visited. In husking rice the Penyahbongs, Saputans, and Penihings have the same method of gathering the grains back again under the pestle with the hands instead of with the feet, as is the custom of the Kenyahs and Kayans. All day there were brought for sale objects of ethnography, also beetles, animals, and birds. Two attractive young girls sold me their primitive necklaces, consisting of small pieces of the stalks of different plants, some of them odoriferous, threaded on a string. One girl insisted that I put hers on and wear it, the idea that it might serve any purpose other than to adorn the neck never occurring to them. Two men arrived from Nohacilat, a neighbouring kampong, to sell two pieces of aboriginal wearing apparel, a tunic and a skirt. Such articles are very plentiful down there, they said, and offered them at an astonishingly reasonable price.

Malay is not spoken here, and we got on as best we could—nevertheless the want of an interpreter was seriously felt. The chief himself spoke some and might have served fairly well, but he studiously remained away from me, and even took most of the men from the kampong to make prahus at another place. I was told that he was afraid of me, and certainly his behaviour was puzzling. Three months later I was enlightened on this point by the information that he had been arrested on account of the murder by spear of a woman and two men, a most unusual occurrence among Dayaks, who, as a rule, never kill any one in their own tribe. With the kampong well−nigh deserted, it soon became evident that nothing was to be gained by remaining and that I would better change the scene of my activities to Long Kai, another Penihing kampong further down the river.

A small garrison had been established there, and by sending a message we secured prahus and men, which enabled us to depart from our present encampment. There were some rapids to pass in which our collector of animals and birds nearly had his prahu swamped, and although it was filled with water, owing to his pluck

nothing was lost. At Long Kai the lieutenant and Mr. Loing put up a long shed of tent material, while I placed my tent near friendly trees, at the end of a broad piece of road on the river bank, far enough from the kampong to avoid its noises and near enough to the river to enjoy its pleasant murmur.

When going to their ladangs in the morning the Dayaks passed my tent, thence following the tiny affluent, Kai, from which the kampong received its name. Under the trees I often had interviews with the Penihings, and also with the nomadic Bukats and Punans who had formed settlements in the neighbouring country. Some of them came of their own accord, others were called by Tingang, the kapala of Long Kai, who did good service as interpreter, speaking Malay fairly well. From my tent I had a beautiful view of the river flowing between wooded hills, and the air was often laden with the same delicious fragrance from the bloom of a species of trees which I had observed on the Kasao River. Here, however, the odour lasted hours at a time, especially morning and evening. On the hills of the locality grow many sago palms, to which the natives resort in case rice is scarce.

It was quite agreeable to see a flag again, the symbol of the Dutch nation being hoisted every day on the hill where the military encampment was located, usually called benting (fortress). Even the striking of a bell every half−hour seemed acceptable as a reminder of civilisation. The soldiers were natives, mostly Javanese. The lieutenant, Th. F.J. Metsers, was an amiable and courteous man who loaned me Dutch newspapers, which, though naturally months out of date, nevertheless were much appreciated. We were about 1 north of equator and usually had beautiful, clear nights in the month of May. The Great Bear of the northern hemisphere was visible above the horizon and the planet Venus looked large and impressive. There were no mosquitoes and the air was fine, but at times the heat of the day was considerable, especially before showers. After two days of very warm weather without rain ominous dark clouds gathered in the west, and half an hour later we were in the thick of a downpour and mist which looked as if it might continue for days. But in inland Borneo one knows a rainstorm will soon belong to the past. Two hours later the storm abated and before sunset all was over, and the night came again clear and glorious.

One afternoon seven prahus with thirty−odd Dayaks were seen to arrive from down the river, poling their way. They were Kayans from Long Blu, en route for the Upper Kasao to gather rattan. Some of them called on me and evidently already knew of the expedition. They carried only rice as provisions and told me they intended to be away three months. On the Upper Kasao there is no more rubber to be found, and, according to them, on the upper part of Mahakam there is no more rattan.

The Penihings of Long Kai are good−natured and pleasant, and it was refreshing to be among real, natural people to whom it never occurs that nudity is cause for shame; whom the teaching of the Mohammedan Malays, of covering the upper body, has not yet reached. This unconsciousness of evil made even the old, hard−working women attractive. They were eager to sell me their wares and implements, and hardly left me time to eat. Their houses had good galleries and were more spacious than one would suppose from a casual glance.

One morning I entered the rooms of one of the principal blians, from whom I wanted to buy his shield, used as a musical instrument to accompany his song. The shield looks like the ordinary variety used by all the tribes of the Mahakam and also in Southern Borneo, but has from four to ten rattan strings tied lengthwise on the back. In singing to call good spirits, antohs, especially in case somebody is ill, he constantly beats with a stick on one of the strings in a monotonous way without any change of time. Among the Penihings this shield is specially made for the blian's use, and unless it be new and unused he will not sell it, because the blood of sacrificial animals has been smeared on its surface and the patient would die. The only way I could secure one was by having it made for me, which a blian is quite willing to do.

This man paid little attention to my suggestion of buying, but suddenly, of his own accord, he seized the shield and played on it to show me how it was done. While he sings he keeps his head down behind the shield, which is held in upright position, and he strikes either with right or left hand. He had scarcely performed a minute when a change came over him. He stamped one foot violently upon the floor, ceased playing, and seemed to be in a kind of trance, but recovered himself quickly. A good antoh, one of several who possessed him, had returned to him after an absence and had entered through the top of his head. So strong is the force of auto−suggestion.

It was a matter of considerable interest to me to meet here representatives of two nomadic tribes of Borneo who had formed small settlements in this remote region. I had already made the acquaintance of the Punans in the Bulungan, but as they are very shy I welcomed the opportunity of meeting them on more familiar terms. For more than a generation a small number has been settled at Serrata, six hours walking distance from Long Kai. The other

nomads, called Bukats, from the mountains around the headwaters of the Mahakam, have lately established themselves on the river a short distance above its junction with the Kasao; a few also live in the Penihing kampong Nuncilao. These recent converts from nomadic life still raise little paddi, depending mostly upon sago. Through the good offices of the Long Kai kapala people of both tribes were sent for and promptly answered the call. The Punan visitors had a kapala who also was a blian, and they had a female blian too, as had the Bukats.

The Punans are simple−minded, shy, and retiring people, and the other nomads even more so. The first−named are more attractive on account of their superior physique, their candid manners, and somewhat higher intellect. The natural food of both peoples is serpents, lizards, and all kinds of animals and birds, the crocodile and omen birds excepted. With the Bukats, rusa must not be eaten unless one has a child, but with the Punans it is permissible in any case. The meat of pig is often eaten when ten days old, and is preferred to that which is fresh. In this they share the taste of the Dayak tribes I have met, with the exception of the Long−Glats. I have known the odour from putrefying pork to be quite overpowering in a kampong, and still this meat is eaten without any ill effect. Salt is not used unless introduced by Malay traders. And evidently it was formerly not known to the Dayaks.

None of these jungle people steal and they do not lie, although children may do either. They were much afraid of being photographed and most of the Bukats declined. A Bukat woman had tears in her eyes as she stepped forward to be measured, but smiled happily when receiving her rewards of salt, tobacco, and a red handkerchief. It had been worth while to submit to the strange ways of the foreigner.

Both tribes are strictly monogamous and distinguished by the severe view they take of adultery, which, however, seldom occurs. While it is regarded as absolutely no detriment to a young girl to sleep with a young man, matrimonial unfaithfulness is relentlessly punished. Payment of damages is impossible. The injured Punan husband cuts the head from both wife and corespondent and retires to solitude, remaining away for a long time, up to two years. If the husband fails to punish, then the woman's brother must perform the duty of executioner. The Bukats are even more severe. The husband of an erring wife must kill her by cutting off her head, and it is incumbent on her brother to take the head of the husband. At present the Punans and Bukats are relinquishing these customs through fear of the Company.

The Bukats told me that they originally came from the river Blatei in Sarawak, and that Iban raids had had much to do with their movements. According to their reports the tribe had recently, at the invitation of the government, left the mountains and formed several kampongs in the western division. One of them, with short stubby fingers, had a broad Mongolian face and prominent cheek−bones, but not Mongolian eyes, reminding me somewhat of a Laplander.

The Punans and the Bukats have not yet learned to make prahus, but they are experts in the manufacture of sumpitans. They are also clever at mat−making, the men bringing the rattan and the women making the mats. Cutting of the teeth is optional. The gall of the bear is used as medicine internally and externally. In case of fractured bones a crude bandage is made from bamboo sticks with leaves from a certain tree. For curing disease the Punans use strokes of the hand. Neither of these nomadic tribes allow a man present when a woman bears a child. After child−birth women abstain from work four days. When anybody dies the people flee, leaving the corpse to its fate.

Having accomplished as much as circumstances permitted, in the latter part of May we changed our encampment to Long Tjehan, the principal kampong of the Penihings, a little further down the river. On a favourable current the transfer was quickly accomplished. We were received by friendly natives, who came voluntarily to assist in putting up my tent, laying poles on the moist ground, on which the boxes were placed inside. They also made a palisade around it as they had seen it done in Long Kai, for the Dayaks are very adaptable people. Several men here had been to New Guinea and they expressed no desire to return, because there had been much work, and much beri−beri from which some of their comrades had died. One of them had assisted in bringing Doctor Lorenz back after his unfortunate fall down the ravine on Wilhelmina Top.

CHAPTER XXI

AN EXCURSION DOWN THE RIVER—LONG PAHANGEI—THE OMA−SULINGS—THE GREAT TRIENNIAL FESTIVAL—HOSPITABLE NATIVES—INCIDENTS IN PHOTOGRAPHY

It is significant as to the relations of the tribes that not only Bukats and Punans, but also the Saputans, are invited to take part in a great triennial Bahau festival when given at Long Tjehan. Shortly after our arrival we were advised that this great feast, which here is called tasa and which lasts ten days, was to come off immediately at an Oma−Suling kampong, Long Pahangei, further down the river.

Though a journey there might be accomplished in one day, down with the current, three or four times as long would be required for the return. However, as another chance to see such a festival probably would not occur, I decided to go, leaving the sergeant, the soldier collector, and another soldier behind, and two days later we were preparing for departure in three prahus.

What with making light shelters against sun and rain, in Malay called atap, usually erected for long journeys, the placing of split bamboo sticks in the bottom of my prahu, and with the Penihings evidently unaccustomed to such work, it was eight o'clock before the start was made. Pani, a small tributary forming the boundary between the Penihings and the Kayans, was soon left behind and two hours later we passed Long Blu, the great Kayan kampong. The weather was superb and the current carried us swiftly along. The great Mahakam River presented several fine, extensive views, with hills on either side, thick white clouds moving slowly over the blue sky. As soon as we entered the country of the Oma−Suling it was pleasant to observe that the humble cottages of the ladangs had finely carved wooden ornaments standing out from each gable.

We arrived at Long Pahangei (*h* pronounced as Spanish jota) early in the afternoon. Gongs were sounding, but very few people were there, and no visitors at all, although this was the first day of the feast. This is a large kampong lying at the mouth of a tributary of the same name, and is the residence of a native district kapala. After I had searched everywhere for a quiet spot he showed me a location in a clump of jungle along the river bank which, when cleared, made a suitable place for my tent. Our Penihings were all eager to help, some clearing the jungle, others bringing up the goods as well as cutting poles and bamboo sticks. Evidently they enjoyed the work, pitching into it with much gusto and interest. The result was a nice though limited camping place on a narrow ridge, and I gave each man one stick of tobacco as extra payment.

During our stay here much rain fell in steady downpours lasting a night or half a day. As the same condition existed higher up the river, at times the water rose menacingly near my tent, and for one night I had to move away. But rain in these tropics is never merciless, it seems to me. Back from the coast there is seldom any wind, and in the knowledge that at any time the clouds may give place to brilliant sunshine, it is not at all depressing. Of course it is better to avoid getting wet through, but when this occurs little concern is felt, because one's clothing dries so quickly.

The Oma−Sulings are pleasant to deal with, being bashful and unspoiled. The usual repulsive skin diseases are seldom seen, and the women are attractive. There appears to have been, and still is, much intercourse between the Oma−Sulings and their equally pleasant neighbours to the east, the Long−Glats. Many of the latter came to the feast and there is much intermarrying among the nobles of the two tribes. Lidju, my assistant and friend here, was a noble of the Long−Glats with the title of raja and married a sister of the great chief of the Oma−Sulings. She was the principal of the numerous female blians of the kampong, slender of figure, active both in her profession and in domestic affairs, and always very courteous. They had no children. Although he did not speak Malay very well, still, owing to his earnestness of purpose, Lidju was of considerable assistance to me.

The kampong consists of several long houses of the usual Dayak style, lying in a row and following the river course, but here they were separated into two groups with a brook winding its way to the river between them. Very large drums, nearly four metres long, hung on the wall of the galleries, six in one house, with the head somewhat higher than the other end. This instrument, slightly conical in shape, is formed from a log of fine−grained wood, light in colour, with a cover made from wild ox hide. An especially constructed iron tool driven by blows from a small club is used to hollow out the log, and the drum is usually completed in a single night, many men taking turns. In one part of the house lying furthest west lived Dayaks called Oma−Palo, who

were reported to have been in this tribe a hundred years. They occupied “eight doors,” while further on, in quarters comprising “five doors,” dwelt Oma−Tepe, more recent arrivals; and both clans have married Oma−Suling women.

The purpose of the great feast that filled everybody's thoughts is to obtain many children, a plentiful harvest, good health, many pigs, and much fruit. A prominent Dayak said to me: “If we did not have this feast there would not be many children; the paddi would not ripen well, or would fail; wild beasts would eat the fowls, and there would be no bananas or other fruits.” The first four days are chiefly taken up with preparations, the festival occurring on the fifth and sixth days. A place of worship adjoining the front of the easternmost house was being constructed, with a floor high above ground on a level with the gallery, with which it was connected by a couple of planks for a bridge. Although flimsily built, the structure was abundantly strong to support the combined weight of the eight female blians who at times performed therein. The hut, which was profusely decorated with long, hanging wood shavings, is called dangei and is an important adjunct of the feast, to which the same name is sometimes given. Ordinary people are not allowed to enter, though they may ascend the ladder, giving access to the gallery, in close proximity to the sanctuary.

Prior to the fifth day a progressive scale is observed in regard to food regulations, and after the sixth, when the festive high mark is reached, there is a corresponding decrease to normal. Only a little boiled rice is eaten the first day, but on the second, third, and fourth, rations are gradually increased by limited additions of toasted rice. The fifth and sixth days give occasion for indulgence in much rice and pork, the quantity being reduced on the seventh, when the remaining pork is finished. On the eighth and ninth days the regulations permit only boiled and toasted rice. Not much food remains on the tenth, when the menu reverts to boiled rice exclusively. Some kinds of fish may be eaten during the ten−day period, while others are prohibited.

It was interesting to observe what an important part the female blians or priest−doctors played at the festival. They were much in evidence and managed the ceremonies. The men of the profession kept in the background and hardly one was seen. During the feast they abstain from bathing for eight days, do not eat the meat of wild babi, nor salt; and continence is the rule. Every day of the festival, morning, afternoon, and evening, a service is performed for imparting health and strength, called melah, of which the children appear to be the chief beneficiaries. Mothers bring babes in cradles on their backs, as well as their larger children. The blian, who must be female, seizing the mother's right hand with her left, repeatedly passes the blade of a big knife up her arm. The child in the cradle also stretches out its right arm to receive treatment, while other children and women place their right hands on the hand and arm of the first woman, five to ten individuals thus simultaneously receiving the passes which the blian dispenses from left to right. She accompanies the ceremony with murmured expressions suggesting removal from the body of all that is evil, with exhortations to improvement, etc.

This service concluded, a man standing in the background holding a shield with the inside uppermost, advances to the side of the mother and places it horizontally under the cradle, where it is rapidly moved forward and backward. Some of the men also presented themselves for treatment after the manner above described, and although the melah performance is usually reserved for this great feast, it may be employed by the blian for nightly service in curing disease.

This was followed by a dance of the blians present, nine or ten in number, to the accompaniment of four gongs and one drum. They moved in single file, most of them making two steps and a slight turn to left, two steps and a slight turn to right, while others moved straight on. In this way they described a drawn−out circle, approaching an ellipse, sixteen times. After the dancing those who took part in the ceremonies ate toasted rice. Each day of the feast in the afternoon food was given to antoh by blians and girl pupils. Boiled rice, a small quantity of salt, some dried fish, and boiled fowl were wrapped in pieces of banana leaves, and two such small parcels were offered on each occasion.

Meantime the festive preparations continued. Many loads of bamboo were brought in, because much rice and much pork was to be cooked in these handy utensils provided by nature. Visitors were slowly but steadily arriving. On the fourth day came the principal man, the Raja Besar (great chief), who resides a little further up the river, accompanied by his family. The son of a Long−Glat father and an Oma−Suling mother, Ledjuli claimed to be raja not only of these tribes, but also of the Kayans. Next morning Raja Besar and his stately wife, of Oma−Suling nobility, accompanied by the kapala of the kampong and others, paid me a visit, presenting me with a long sugarcane, a somewhat rare product in these parts and considered a great delicacy, one large papaya, white

onions, and bananas. In return I gave one cake of chocolate, two French tins of meat, one tin of boiled ham, and tobacco.

Domestic pigs, of which the kampong possessed over a hundred, at last began to come in from the outlying ladangs. One by one they were carried alive on the backs of men. The feet having first been tied together, the animal was enclosed in a coarse network of rattan or fibre. For the smaller specimens tiny, close−fitting bamboo boxes had been made, pointed at one end to accommodate the snout. The live bundles were deposited on the galleries, and on the fifth day they were lying in rows and heaps, sixty−six in number, awaiting their ultimate destiny. The festival was now about to begin in earnest and an air of expectancy was evident in the faces of the natives. After the performance of the melah and the dance of the blians, and these were a daily feature of the great occasion, a dance hitherto in vogue at night was danced in the afternoon. In this the people, in single file, moved very slowly with rhythmic steps, describing a circle around three blians, including the principal one, who sat smoking in the centre, with some bamboo baskets near by. Next morning the circular dance was repeated, with the difference that the participants were holding on to a rope.

About four o'clock in the afternoon the Dayaks began to kill the pigs by cutting the artery of the neck. The animals, which were in surprisingly good condition, made little outcry. The livers were examined, and if found to be of bad omen were thrown away, but the pig itself is eaten in such cases, though a full−grown fowl or a tiny chicken only a few days old must be sacrificed in addition. The carcasses were freed from hair by fire in the usual way and afterward cleaned with the knife. The skin is eaten with the meat, which at night was cooked in bamboo. Outside, in front of the houses, rice cooking had been going on all day. In one row there were perhaps fifty bamboos, each stuffed with envelopes of banana leaves containing rice, the parcels being some thirty centimetres long and three wide.

During the night there was a grand banquet in all the houses. Lidju, my assistant, did not forget, on this day of plenty, to send my party generous gifts of fresh pork. To me he presented a fine small ham. As salt had been left behind we had to boil the meat a la Dayak in bamboo with very little water, which compensates for the absence of seasoning. A couple of men brought us two bamboos containing that gelatinous delicacy into which rice is transformed when cooked in this way. And, as if this were not enough, early next morning a procession arrived carrying food on two shields, the inside being turned upward. On these were parcels wrapped in banana leaves containing boiled rice, to which were tied large pieces of cooked pork. The first man to appear stepped up to a banana growing near, broke off a leaf which he put on the ground in front of me, and placed on it two bundles. The men were unable to speak Malay and immediately went away without making even a suggestion that they expected remuneration, as did the two who had given us rice. I had never seen them before.

The sixth day was one of general rejoicing. Food was exchanged between the two groups of houses and people were in a very joyful mood, eating pork, running about, and playing tricks on each other. Both men and women carried charcoal mixed with the fat of pork, with which they tried to smear the face and upper body of all whom they met. All were privileged to engage in this sport but the women were especially active, pursuing the men, who tried to avoid them, some taking refuge behind my tent. The women followed one man through the enclosure surrounding the tent, at my invitation, but they did not succeed in catching him. This practical joking was continued on the following days except the last.

The Oma−Palo had their own festival, which lasted only one day. It began in the afternoon of the sixth day and I went over to see it. The livers of the pigs were not in favourable condition, which caused much delay in the proceedings, and it was nearly five o'clock when they finally began to make a primitive dangei hut, all the material for which had been gathered. A few slim upright poles with human faces carved at the upper ends were placed so as to form the outline of a quadrangle. On the ground between them planks were laid, and on the two long sides of this space were raised bamboo stalks with leaves on, which leaned together and formed an airy cover. It was profusely adorned with wood shavings hung by the ends in long spirals, the whole arrangement forming a much simpler house of worship than the one described above. The kapala having sacrificed a tiny chicken, a man performed a war dance on the planks in superb fashion, and after that two female blians danced. Next morning I returned and asked permission to photograph the dancing. The kapala replied that if a photograph were made while they were working—that is to say, dancing—they would have to do all their work over again, otherwise some misfortune would come upon them, such as the falling of one of the bamboo stalks, which might kill somebody. Later, while they were eating, for example, there would be no objection to the accomplishment of

my desire.

With the eighth day an increased degree of ceremonials became noticeable, and in order to keep pace therewith I was driven to continuous activity. On a muggy, warm morning I began work by photographing the Raja Besar, who had given me permission to take himself and his family. When I arrived at the house where he was staying he quickly made his preparations to “look pleasant,” removing the large rings he wore in the extended lobes of his ears and substituting a set of smaller ones, eight for each ear. He was also very particular in putting on correct apparel, whether to appear in warrior costume or as a private gentleman of the highest caste. His sword and the rest of his outfit, as might be expected, were of magnificent finish, the best of which Dayak handicraft is capable. He made altogether a splendid subject for the camera, but his family proved less satisfactory. I had to wait an hour and a half before his womenfolk were ready, femininity apparently being alike in this regard in all races. When they finally emerged from the house in great array (which showed Malay influence) they were a distinct disappointment.

The raja, who was extremely obliging, ordered the principal men of the kampong to appear in complete war outfit, and showed us how an imaginary attack of Iban head−hunters would be met. They came streaming one after another down the ladder, made the evolutions of a running attack in close formation, holding their large shields in front of them, then ran to the water and paddled away, standing in their prahus, to meet the supposed enemy in the utan on the other side of the river.

At noon the female blians were preparing for an important ceremony in the dangei hut, with a dance round it on the ground later, and I therefore went up to the gallery. The eight performers held each other by the hands in a circle so large that it filled the hut. Constantly waving their arms backward and forward they moved round and round. Some relics from Apo Kayan were then brought in: a small, shining gong without a knob and a very large bracelet which looked as if it had been made of bamboo and was about eight centimetres in diameter. One of the blians placed the bracelet round her folded hands and then ran round the circle as well as through it; I believe this was repeated sixteen times. When she had finished running they all walked in single file over into the gallery in order to perform the inevitable melah.

Shortly afterward followed a unique performance of throwing rice, small bundles of which, wrapped in banana leaves, were lying in readiness on the floor. Some of the men caught them with such violence that the rice was spilled all about, and then they flipped the banana leaves at those who stood near. Some of the women had crawled up under the roof in anticipation of what was coming. After a few minutes passed thus, the eight blians seated themselves in the dangei hut and prepared food for antoh in the way described above, but on this occasion one of them pounded paddi with two short bamboo sticks, singing all the while.

A very amusing entertainment then began, consisting of wrestling by the young men, who were encouraged by the blians to take it up and entered the game with much enthusiasm, one or two pairs constantly dancing round and round until one became the victor. The participants of their own accord had divested themselves of their holiday chavats and put on small ones for wrestling. With the left hand the antagonist takes hold of the descending portion of the chavat in the back, while with the right he grasps the encircling chavat in front. They wrestled with much earnestness but no anger. When the game was continued the following morning the young men presented a sorry spectacle. Rain had fallen during the night, and the vanquished generally landed heavily on their backs in the mud−holes, the wrestlers joining in the general laugh at their expense. To encourage them I had promised every victor twenty cents, which added much to the interest.

Having concluded their task of feeding the antohs the blians climbed down the ladder and began a march in single file round the dangei hut, each carrying one of the implements of daily life: a spear, a small parang, an axe, an empty rattan bag in which the bamboos are enclosed when the woman fetches water, or in which vegetables, etc., are conveyed, and another bag of the same material suitable for transporting babi. Four of the women carried the small knife which is woman's special instrument, though also employed by the men. When the eight blians on this, the eighth day, had marched sixteen times around the dangei they ascended the ladder again. Shortly afterward a man standing on the gallery pushed over the flimsy place of worship—a signal that the end of the feast had come. On the previous day a few visitors had departed and others left daily.

The feast had brought together from other parts about 200 Oma−Sulings and Long−Glats. The women of both tribes showed strikingly fine manners, especially those belonging to the higher class, which was well represented. Some were expensively dressed, though in genuine barbaric fashion as indicated by the ornaments sewn upon

their skirts, which consisted of hundreds of florins and ringits. It should be conceded, however, that with the innate artistic sense of the Dayaks, the coins, all scrupulously clean, had been employed to best advantage in pretty designs, and the damsels were strong enough to carry the extra burden.

The climax had been passed and little more was going on, the ninth day being given over to the amusement of daubing each other with black paste. On the tenth day they all went away to a small river in the neighbourhood, where they took their meals, cooking paddi in bamboo, also fish in the same manner. This proceeding is called nasam, and the pemali (tabu) is now all over. During the days immediately following the people may go to the ladang, but are obliged to sleep in the kampong, and they must not undertake long journeys. When the feast ended the blians placed four eggs in the clefts of four upright bamboo sticks as sacrifice to antoh. Such eggs are gathered from hens that are sitting, and those which have become stale in unoccupied nests are also used. If there are not enough such eggs, fresh ones are taken.

CHAPTER XXII

DAYAK DOGS—A FUNERAL ON THE MAHAKAM—OUR RETURN JOURNEY—AGAIN AT LONG TJEHAN—IN SEARCH OF A UNIQUE ORCHID—A BURIAL CAVE

Every night while we were camped here, and frequently in the day, as if controlled by magic, the numerous dogs belonging to the Dayaks suddenly began to howl in chorus. It is more ludicrous than disagreeable and is a phenomenon common to all kampongs, though I never before had experienced these manifestations in such regularity and perfection of concerted action. One or two howls are heard and immediately all canines of the kampong and neighbouring ladangs join, perhaps more than a hundred in one chorus. At a distance the noise resembles the acclamations of a vast crowd of people. The Penihings and Oma−Sulings treat man's faithful companion well, the former even with affection; and the dogs, which are of the usual type, yellowish in colour, with pointed muzzle, erect ears, and upstanding tail, are in fine condition. A trait peculiar to the Dayak variety is that he never barks at strangers, permitting them to walk on the galleries or even in the rooms without interference. Groups of these intelligent animals are always to be seen before the house and on the gallery, often in terrific fights among themselves, but never offensive to strangers.

They certainly serve the Dayaks well by holding the pig or other animal at bay until the men can come up and kill it with spear. Some of them are afraid of bear, others attack them. They are very eager to board the prahus when their owners depart to the ladangs, thinking that it means a chase of the wild pig. Equally eager are they to get into the room at night, or at any time when the owner has left them outside. Doors are cleverly opened by them, but when securely locked the dogs sometimes, in their impatience, gnaw holes in the lower part of the door which look like the work of rodents, though none that I saw was large enough to admit a canine of their size. One day a big live pig was brought in from the utan over the shoulder of a strong man, its legs tied together, and as a compliment to me the brute was tethered to a pole by one leg, while the dogs, about fifty, barked at and harassed it. This, I was told, is the way they formerly were trained. As in a bull−fight, so here my sympathy was naturally with the animal, which managed to bite a dog severely in the side and shook another vigorously by the tail. Finally some young boys gave it a merciful death with spears.

A woman blian died after an illness of five days, and the next forenoon a coffin was made from an old prahu. She had not been ill long, so the preparations for the funeral were brief. Early in the afternoon wailing was heard from the gallery, and a few minutes later the cortege emerged on its way to the river bank, taking a short cut over the slope between the trees, walking fast because they feared that if they lingered other people might become ill. There were only seven or eight members of the procession; most of whom acted as pall−bearers, and all were poor people. They deposited their burden on the bank, kneeling around it for a few minutes and crying mournfully. A hen had been killed at the house, but no food was offered to antoh at the place of embarkation, as had been expected by some of their neighbours.

Covered with a large white cloth, the coffin was hurriedly taken down from the embankment and placed in a prahu, which they immediately proceeded to paddle down−stream where the burial was to take place in the utan some distance away. The reddish−brown waters of the Mahakam, nearly always at flood, flowed swiftly between the walls of dark jungle on either side and shone in the early afternoon sun, under a pale−blue sky, with beautiful, small, distant white clouds. Three mourners remained behind, one man standing, gazing after the craft. Then, as the prahu, now very small to the eye, approached the distant bend of the river, in a few seconds to disappear from sight, the man who had been standing in deep reflection went down to the water followed by the two women, each of whom slipped off her only garment in their usual dexterous way, and all proceeded to bathe, thus washing away all odours or other effects of contact with the corpse, which might render them liable to attack from the antoh that had killed the woman blian.

In the first week of June we began our return journey against the current, arriving in the afternoon at Data Lingei, an Oma−Suling kampong said to be inhabited also by Long−Glats and three other tribes. We were very welcome here. Although I told them I did not need a bamboo palisade round my tent for one night, these hospitable people, after putting up my tent, placed round it a fence of planks which chanced to be at hand. At dusk everything was in order and I took a walk through the kampong followed by a large crowd which had been

present all the time.

Having told them to bring all the articles they wanted to sell, I quickly bought some good masks and a number of tail feathers from the rhinoceros hornbill, which are regarded as very valuable, being worn by the warriors in their rattan caps. All were “in the market,” prices were not at all exorbitant, and business progressed very briskly until nine o'clock, when I had made valuable additions, especially of masks, to my collections. The evening passed pleasantly and profitably to all concerned. I acquired a shield which, besides the conventionalised representation of a dog, exhibited a wild−looking picture of an antoh, a very common feature on Dayak shields. The first idea it suggests to civilised man is that its purpose is to terrify the enemy, but my informant laughed at this suggestion. It represents a good antoh who keeps the owner of the shield in vigorous health.

The kapala's house had at once attracted attention on account of the unusually beautiful carvings that extended from each gable, and which on a later occasion I photographed. These were long boards carved in artistic semblance of the powerful antoh called nagah, a benevolent spirit, but also a vindictive one. The two carvings together portrayed the same monster, the one showing its head and body, the other its tail. Before being placed on the gables a sacrifice had been offered and the carvings had been smeared with blood—in other words, to express the thought of the Dayak, as this antoh is very fierce when aroused to ire, it had first been given blood to eat, in order that it should not be angry with the owner of the house, but disposed to protect him from his enemies. While malevolent spirits do not associate with good ones, some which usually are beneficent at times may do harm, and among these is one, the nagah, that dominates the imagination of many Dayak tribes. It appears to be about the size of a rusa, and in form is a combination of the body of that animal and a serpent, the horned head having a disproportionately large dog's mouth. Being an antoh, and the greatest of all, it is invisible under ordinary conditions, but lives in rivers and underground caves, and it eats human beings.

Lidju, who accompanied me as interpreter and to be generally useful, had aroused the men early in the morning to cook their rice, so that we could start at seven o'clock, arriving in good time at the Kayan kampong, Long Blu. Here, on the north side of the river, was formerly a small military establishment, inhabited at present by a few Malay families, the only ones on the Mahakam River above the great kihams. Accompanied by Lidju I crossed the river to see the great kampong of the Kayans.

Ascending the tall ladder which leads up to the kampong, we passed through long, deserted−looking galleries, and from one a woman hurriedly retired into a room. The inhabitants were at their ladangs, most of them four hours' travel from here. Arriving finally at the house of Kwing Iran, I was met by a handful of people gathered in its cheerless, half−dark gallery. On our return to a newly erected section of the kampong we met the intelligent kapala and a few men. Some large prahus were lying on land outside the house, bound for Long Iram, where the Kayans exchange rattan and rubber for salt and other commodities, but the start had been delayed because the moon, which was in its second quarter, was not favourable. These natives are reputed to have much wang, owing to the fact that formerly they supplied rice to the garrison, receiving one ringit for each tinful.

Though next day was rainy and the river high, making paddling hard work, we arrived in good time at Long Tjehan and found ourselves again among the Penihings. During the month I still remained here I made valuable ethnological collections and also acquired needed information concerning the meaning and use of the different objects, which is equally important. The chief difficulty was to find an interpreter, but an intelligent and efficient Penihing offered his services. He “had been to Soerabaia,” which means that he had been at hard labour, convicted of head−hunting, and during his term had acquired a sufficient knowledge of Malay to be able to serve me. My Penihing collections I believe are complete. Of curious interest are the many games for children, among them several varieties of what might be termed toy guns and different kinds of puzzles, some of wood while others are plaited from leaves or made of thread.

The kampong lies at the junction of the Mahakam and a small river called Tjehan, which, like several other affluents from the south, originates in the dividing range. The Tjehan contains two or three kihams but is easy to ascend, and at its head−waters the range presents no difficulties in crossing. This is not the case at the sources of the Blu, where the watershed is high and difficult to pass. Small parties of Malays occasionally cross over to the Mahakam at these points as well as at Pahangei. In the country surrounding the kampong are several limestone hills, the largest of which, Lung Karang, rises in the immediate vicinity.

Doctor Nieuwenhuis on his journey ascended some distance up the Tjehan tributary, and in the neighbourhood of Lung Karang his native collector found an orchid which was named *phalaenopsis gigantea*, and is known only

from the single specimen in the botanical garden at Buitenzorg, Java. On a visit there my attention was drawn to the unusual size of its leaves and its white flowers. I then had an interview with the Javanese who found it, and decided that when I came to the locality I would try to secure some specimens of this unique plant. Having now arrived in the region, I decided to devote a few days to looking for the orchid and at the same time investigate a great Penihing burial cave which was found by my predecessor.

Accompanied by two of our soldiers and with five Dayak paddlers, I ascended the Tjehan as far as the first kiham, in the neighbourhood of which I presumed that the burial cave would be and where, therefore, according; to the description given to me, the orchid should be found. There was no doubt that we were near a locality much dreaded by the natives; even before I gave a signal to land, one of the Penihings, recently a head−hunter, became hysterically uneasy. He was afraid of orang mati (dead men), he said, and if we were going to sleep near them he and his companions would be gone. The others were less perturbed, and when assured that I did not want anybody to help me look for the dead but for a rare plant, the agitated man, who was the leader, also became calm.

We landed, but the soldier who usually waited upon me could not be persuaded to accompany me. All the Javanese, Malays, and Chinamen are afraid of the dead, he said, and declined to go. Alone I climbed the steep mountain−side; the ascent was not much over a hundred metres, but I had to make my way between big blocks of hard limestone, vegetation being less dense than usual. It was about four o'clock in the afternoon when, from the top of a crest which I had reached, I suddenly discovered at no great distance, perhaps eighty metres in front of me, a large cave at the foot of a limestone hill. With the naked eye it was easy to distinguish a multitude of rough boxes piled in three tiers, and on top of all a great variety of implements and clothing which had been deposited there for the benefit of the dead. It made a strange impression in this apparently abandoned country where the dead are left in solitude, feared and shunned by their former associates.

No Penihing will go to the cave of the dead except to help carry a corpse, because many antohs are there who make people ill. The extreme silence was interrupted only once, by the defiant cry of an argus pheasant. As the weather was cloudy I decided to return here soon, by myself, in order to photograph and make closer inspection of the burial−place. I then descended to the prahu, and desiring to make camp at a sufficient distance to keep my men in a tranquil state of mind, we went about two kilometres down the river and found a convenient camping−place in the jungle.

On two later occasions I visited the cave and its surroundings, becoming thoroughly acquainted with the whole mountain. The Penihings have an easy access to this primeval tomb, a little further below, by means of a path leading from the river through a comparatively open forest. The corpse in its box is kept two to seven days in the house at the kampong; the body of a chief, which is honoured with a double box, remains ten days. According to an otherwise trustworthy Penihing informant, funeral customs vary in the different kampongs of the tribe, and generally the box is placed on a crude platform a metre above the ground.

As for the orchid, I, as well as the Dayaks, who were shown an illustration of it, searched in vain for three days. There is no doubt that I was at the place which had been described to me, but the plant must be extremely rare and probably was discovered accidentally “near the water,” as the native collector said, perhaps when he was resting.

CHAPTER XXIII

A PROFITABLE STAY—MAGNIFICENT FRUITS OF BORNEO—OMEN BIRDS—THE PENIHINGS IN DAILY LIFE—TOP PLAYING—RELIGIOUS IDEAS—CURING DISEASE

On my return to camp a pleasant surprise awaited me in the arrival of mail, the first in six months. The days that followed were laborious: buying, arranging, and cataloguing collections. From early morning Penihings came to my tent, desiring to sell something, and did not quit until late at night. Some were content to stand quietly looking at the stranger for ten or fifteen minutes, and then to go away, their places being taken by others. But after all it was a happy time, much being accomplished every day by adding to my collections and gaining much interesting information.

Over my tent grew a couple of rambutan trees, and close by were two trees bearing a still more delicate fruit called lansat (*lansium domesticum*). It is mildly acid, like the best kind of orange, but with more flavour, and In appearance resembles a small plum without a stone, and when ripe is almost white in colour. Every morning, at my request, the chief climbed one of these trees, on Which the fruit hung by the bushel, and sold me a basketful for a trifle. The lansat is so easily digested that one can eat it freely in the evening without inconvenience; in fact it is a decided aid to digestion. According to the natives these trees are plentiful in the utan, but in the kampong they, as well as the famous durian and the rambutan, have been raised from seed. Borneo certainly possesses fine wild fruits, but as the jungle is laborious to pass through it would be most difficult to find the trees. I have hitherto directed attention to the superior quality attained by the fruits of the island which are grown from imported stock, as the pineapple, pomelo, etc.

The usual nuisance of crowing cocks is not to be avoided in a Dayak kampong, though here they were few. I saw a hen running with a small chicken in her beak, which she had killed in order to eat it—a common occurrence according to the Penihings. The ludicrous self−sufficiency of the Bornean male fowls, at times very amusing, compensates to some extent for the noise they make, but they are as reckless as the knights−errant of old. Outside my tent at dawn one morning I noticed one of them paying devoted attention to a hen which was hovering her chickens. He stood several seconds with his head bent down toward hers, then walked round her, making demonstrations of interest, and again assumed his former position, she meanwhile clucking protectingly to her brood. Finally, he resolutely attacked her, whereupon she emitted a discordant shriek while seven or eight tiny yellow chicks streamed forth from underneath her; in response to her cry of distress another cock immediately appeared upon the scene and valiantly chased the disturber away.

No less than nine prahus started out one day, bound for Long Iram to buy salt and other goods, taking a small quantity of rattan. The following day, late in the afternoon, the party returned, having passed the night a short distance away. As they had approached Long Blu an omen bird, evidently a small woodpecker, had flown across their path in front of the first prahu, whereupon the whole flotilla at once retraced their course—a tedious day's trip against the current. It makes no difference whether this bird flies from left to right, or from right to left, or whether it crosses in front or behind the boat. If the bird is heard from the direction on the left of the party the augury is bad, whether he is seen or not. If heard from the right side everything is well. After waiting three days the party proceeded on their way.

There are seven omen birds, according to the Penihings, and they are regarded as messengers sent by a good antoh to warn of danger. For the same purpose he make a serpent pass in front of the prahu, or a rusa cry in the middle of the day. At night this cry is immaterial. The most inauspicious of all omens is the appearance of a centipede. If a man in a ladang is confronted with such an animal he at once stops work there and takes up a new field.

The tribal name of the Penihings is A−o−haeng. Until recently each kampong had from two to five supi, chiefs or rajas, one being superior to the others. The office was hereditary. There are still several rajas in one kampong, for instance, three in Long Tjehan. The Penihings have a practical turn of mind and though they usually tell the truth at times they may steal. They are the best workers among the tribes on the Mahakam River (above the great rapids) and on a journey they travel in their prahus day and night, resting only a couple of hours in the early morning. However, the custom of travelling at night may be due to fear of meeting omen birds.

The hair of the Penihings and the Oma−Sulings, though it looks black, in reality is brown with a slight reddish tint plainly visible when sunlight falls through it. I believe the same is the case with other Dayak tribes. In Long Tjehan I observed two natives who, though passing as Penihings, were of decidedly different type, being much darker in colour and of powerful build, one having curly hair while that of the other was straight. Penihing women have unpleasantly shrill voices, a characteristic less pronounced with the men. Members of this tribe are not so fine−looking as those of other tribes on the Mahakam, with the exception of the Saputans.

When leaving the kampong on his daily trips to the ladang, or when he travels, the Penihing carries his shield. Even when pig−hunting, if intending to stay out overnight, he takes this armour, leaving it however at his camping−place. A spear is also carried, especially on trips to the ladang. The sumpitan, called sawput, is no longer made and the tribe is not very apt at its use; therefore, being unable to kill the great hornbill themselves, these natives have to buy its highly valued tail feathers from the Punans. The latter and the Bukats, who are the greater experts in the use of the sumpitan, notwithstanding their limited facilities, are also the better makers, which is by no means a small accomplishment. These nomads, and to some extent the Saputans as well, furnish this weapon to all the Bahau tribes, the Kayans excepted.

When meeting, no salutations are made. The mother uses for her babe the same cradle in which she herself was carried on her mother's back. It is of the usual Dayak pattern, and when it becomes worn or broken a new one is provided, but the old one remains hanging in the house. A cradle is never parted with, because of the belief that the child's life would thereby be imperilled. Should the little one die, the cradle is thrown into the river. An unmarried man must not eat rusa nor fowls, and a married man is prohibited from doing so until his wife has had three children. Men should not touch with their hands the loom, nor the ribbon which is passed round the back of the woman when she weaves, nor should a woman's skirt be touched by a man. These precautions are taken to avoid bad luck in fishing and hunting, because the eyesight is believed to be adversely affected by such contact. Their sacred number is four.

An unusual game played with large tops is much practised for the purpose of taking omens in the season when the jungle is cleared in order to make new ladangs. The top (bae−ang) is very heavy and is thrown by a thin rope. One man sets his spinning by drawing the rope backward in the usual way; to do this is called niong. Another wishing to try his luck, by the aid of the heavy cord hurls his top at the one that is spinning, as we would throw a stone. To do this is called maw−pak, and hence the game gets its name, maw−pak bae−ang. If the second player hits the spinning top it is a good omen for cutting down the trees. If he fails, another tries his luck, and so on. The long−continued spinning of a top is also a favourable sign for the man who spins it. With the Katingans a hit means that it is advisable to cut the trees at once, while a miss necessitates a delay of three days. Every day, weather permitting, as soon as the men return from the ladangs in the evening, about an hour before sunset, this game is played on the space before the houses of the kampong. Sometimes only two men consult fate, spinning alternately. The same kind of top is found among the Kayans, Kenyahs, and other Dayak tribes.

According to the information I obtained from the Dayaks they believe that the soul has eternal existence, and although many tribes have the idea that during life several souls reside in one individual, after death only one is recognised, which is generally called liao. One or more souls may temporarily leave the body, thereby causing illness.

Neither in this life nor the next are there virtuous or sinful souls, the only distinction being in regard to social standing and earthly possessions, and those who were well−to−do here are equally so there. With the Katingans whatever is essential to life in this world is also found in the next, as houses, men, women, children, dogs, pigs, fowls, water−buffaloes, and birds. People are stronger there than here and cannot die. The principal clothing of the liao is the tatu marks, which it will always keep. The garments worn besides are new and of good quality. When my informant, a native official of Kasungan, who sports semi−civilised dress, expressed his disapproval of the poor wearing quality of his trousers to an old Katingan, the latter exclaimed: “That matters not. Above, all new ones!” In the belief of the Duhoi (Ot−Danums) the liao remains with the body until the funeral−house falls into decay, perhaps for twenty years, when it enters the soil and “is then poor.” The idea of the Penihings about life after death is vague, and they do not pretend to know where the soul goes.

The Penihings acknowledge five souls, or batu, in each individual: one above each eye, one at either side of the chest below the arm, and one at the solar plexus. The souls above the eyes are able to leave their abiding−place, but the others can go only short distances. If the first−named depart the person becomes ill next

day, the immediate cause being that a malevolent antoh, desiring to eat the victim, has entered the head through the top. On perceiving this the two souls located above the eyes escape and the blian is called upon to bring them back, for unless they return the afflicted one will die.

A fowl or a pig, or both, may then be killed and the blood collected. Some of it is smeared on the patient's forehead, head, and chest, the remainder being offered to antoh, both in plain form and mixed with uncooked rice, as has been described in Chapter XIX. When a fowl is sacrificed the empty skin, suspended from a bamboo stalk, is likewise reserved for antoh, the meat having been consumed, as usual, by those concerned.

As another effective means of inducing the return of the soul the blian sings for several hours during one night or more. In the Penihing tribe he accompanies himself by beating an especially made stringed shield. It is believed that the singer is able to see how the antoh caused the sickness: whether he did it by throwing a spear, by striking with a stick, or by using a sumpitan. In his efforts to restore the patient the blian is told what to sing by a good antoh that enters his head. Without such help no person can sing properly, and the object of the song is to prevail upon a beneficent spirit to eject or kill the evil one so that the souls may return.

The blian usually resorts also to feats of juggling, proceeding in the following way: Clasping his open hands forcibly together over the painful part, at the same time turning himself round and stamping on the floor, he wrings his hands for a few seconds and then, in sight of all, produces an object which in the Penihing conception represents a bad antoh—in fact, by them is called antoh. In this manner he may produce several bits of substance which are thrown away to disappear. According to belief, when the blian performs his trick it is in reality a good antoh that does it for him.

While we were in camp at Long Tjehan there was considerable singing at night for the cure of sick people, and four voices could be heard in different parts of the house at the same time. One night I was prevented from sleeping by a remedial performance just above my tent, which was only a few metres from the house. The clear, strong voice of the blian had resounded for an hour or more, when five loud thumps upon the floor were heard, as if something heavy had fallen. The fact was that the man had stamped hard with his right foot as by sleight−of−hand he caught various objects from the patient, producing in quick succession a piece of wood, a small stone, a fragment of bone, a bit of iron, and a scrap of tin. Five antohs, according to the Penihing interpretation, had been eradicated and had fled. Afterward he extracted some smaller ones in a similar manner but without stamping his foot. The singing was then continued by another man and a woman, in order to call the friendly antoh, that the exercises might be happily concluded.

The blian also tries to placate the malevolent antoh by the gift of food. A Penihing informant said that the evil one also eats the sacrificial blood, including that which is smeared on the patient, and ultimately may leave satisfied. As soon as the souls see that the antoh has gone they return and the victim recovers. The blian's remuneration is usually one parang and a handful of rice. If the person is very ill, a gong and a handful of rice is the fee, but should the patient die the gong is returned. The Duhoi (Ot−Danum) women occasionally put on men's costume, and vice versa, to frighten the antoh that causes illness and keep it at a distance. With the Katingans a good antoh is believed to reside in the saliva applied by the blian for healing purposes to that part of a body which is in pain. The saliva drives out the malevolent antoh, or, in other words, cures the pain.

CHAPTER XXIV

HEAD−HUNTING, ITS PRACTICE AND PURPOSE

The Penihings still live in dread of the head−hunting raids of the Ibans of Sarawak, and the probability of such attacks no doubt caused the recent establishment of a garrison at Long Kai. The Long−Glats on the Merasi, a northern tributary to the Mahakam, are also constantly on guard against the Ibans. Until lately these inveterate head−hunters would cross the mountains, make prahus, then travel down the Upper Mahakam, and commit serious depredations among the kampongs, killing whomsoever they could, the others fleeing to the mountains. As one Penihing chief expressed it to me: “The river was full of their prahus from the Kasao River to Long Blu.” Their last visit was in 1912, when the Bukats reported that a number of Ibans had arrived at the headwaters of the river, but the raid did not materialise, and they retired without making prahus. These raids have naturally brought about much intermingling of the tribes on the Mahakam River, and sometimes three or more may be found living in one kampong.

About twenty years ago there was much fighting in these remote parts of Borneo among Penihings, Saputans, Penjabongs, and Bukats, each tribe making head−hunting raids into the dominions of another, and all being constantly exposed to the fury of the Ibans from the north. Head−hunting raids may include assaults on kampongs, but very often they are cowardly attacks on small groups of unsuspecting people, men, women, and children. The heads thus secured appear to be as highly valued as those acquired under more heroic conditions. The fact is also noteworthy that the heads of Malays are appreciated, but, with few exceptions, not those of white people. Several times I heard of Malay rattan or rubber gatherers who had been disposed of in that way. The head is severed by one stroke.

As a typical case of head−hunting I give the following description of a raid which, twelve years previous to my visit, was made by ten Bukats upon a small party of Saputans who were on a babi hunt. Among the Penyahbongs, Saputans, Punans, and Penihings a woman may accompany her husband or another man on the chase, carry a spear, and assist in killing pig or deer. Bear she does not tackle, but, as my informant said, “even all men do not like to do that.” She also carries her own parang, with which she may kill small pigs and cut down obstacles in her path. The hunting−party, one man and three women, had been successful. The babi had been killed with spears and, in accordance with custom, the head had been cut off with a parang. The carcass had been cut up and the three women carried the meat in the coarse−meshed rattan bags on their backs, while the man bore the head on his shoulder, all homeward bound, when the Bukats attacked them. Only one woman escaped.

The slayers hurried off with the three heads, being afraid of the people of the kampong which was not far away. As usual the heads were tied by the hair to the handle of the shield, and were thus carried to the place where the rattan bags had been left, inside of which they were then placed.

After taking heads the men are on the run for two or three days, travelling at night with torches, and in the evening they make a big fire to dry the heads. The brains, because of the weight, may have been taken out the first evening; this is done through the foramen, and a hole is made with a spear point in the top of the skull. The hair has first been cut off and taken care of, to be tied as ornaments to shields or plaited round the handle of the sword. The Katingans, however, throw away the hair with the flesh. Apprehensive of pursuit, they may dry the head but a little while each night, grass being tied round it when carried. Sometimes damar is used to dry the flesh and the eyes.

The last night out the head−hunters always sleep near their kampong, and early next morning, while it is still dark, they come singing. The people of the kampong waken, array themselves in their best finery, and go to meet them, the women wearing their newest skirts and bringing pieces of nice cloth to present to the conquerors. The man who cut the head carries it suspended from his neck until it is taken from him by a woman who gives him the cloth to wear instead, possibly as a badge of heroism. It makes no difference whether this service is performed by his wife, an unmarried woman, or another man's wife. The singing ceases and all proceed to the kampong, to the house of the kapala, where the heads are hung from the beam at the head of the ladder, and the cloths which were bestowed upon the victors are returned to the women. The heads are left hanging, while for the festivities connected with their arrival a hut, called mangosang, is constructed, consisting of an airy shelter made of two

rows of bamboo stalks supported against each other, and profusely adorned with the inevitable wood shavings.

The head−hunters, who must take their food apart from their associates and in the presence of the heads, now bring water from the river to boil rice, in bamboo, outside on the gallery. When the cooking is finished the heads are brought to take part in the meal, being hung near the place where the men are to eat and about half a metre above the floor, to be out of reach of dogs. A pinch of rice is put into the hole at the top of the skull and the head is addressed in the following words: “Eat this rice first. Don't be angry. Take care of me. Make this body of mine well.” During the period of restrictions imposed on the hunters the heads remain at the same place, sharing the meals as described.

For twelve days the hunters do no work and refrain from eating meat, vegetables, fish, salt, and red pepper, rice being the only permissible food. They are obliged to take their food on the gallery, and those who have never been on such expeditions before must also sleep there during that time. A man who has taken part three or more times may join his wife, but he must take his meals on the gallery. When twelve days have passed no more food is given to the heads, which are hung on the beam again, three to five being placed together in a rattan basket, with leaves around them. At the triennial festival, tasa, blood of pig or fowl mixed with uncooked rice, is offered to the heads.

Usually the head−hunting raids were, and are still to a limited extent, carried far away into distant regions and may occupy several months. The Saputans, who were devotees to the custom, would go as far as the river Melawi in the southwest to Sarawak in the north, as well as to the Murung or Upper Barito River in the east. Sometimes only two to five men would go, but usually there were about ten—an equal number remaining behind in the kampong. Controleur W.J. Michielsen, quoted before, relates an instance of a Dayak from Serayan, whose daughter had been killed by a Katingan head−hunter, who pursued the marauders to their homes, and, on the occasion of the festivities incident to the return of the members of the raid, he cut the head from the murderer of his child while the celebration was in progress. His action was so sudden that they were totally unprepared, and no attempt was made to prevent his escape with the head.

In times gone by when a Saputan man, woman, or child died it was the custom for a member of the family to go forth to look for a head. In the case of an ordinary person one was deemed sufficient, but for a chief five to ten were necessary. When taking a head a cut was made in the slain man's chest with a parang; into the wound the raiders then put their forefingers and sucked the blood from them.

Each head−hunter carried rice in a rattan basket, but he depended for food mainly on sago−palms and wild animals that were killed. After such an expedition has been determined upon, the preparations may occupy a year or even longer, but usually about three months. When all is ready for a start, a delay of from one to four days may be caused by unfavourable interference of an omen bird. Should a bird chance to repeat the omen when another start is made, the party must return to the kampong and wait a long time. The Dayaks are very much guided in their actions by omens taken not only from birds but also from incidents, and merely to hear a certain bird is sufficient reason to change all plans.

When leaving their kampong to take part in an expedition to New Guinea the Penihings heard the cry of a bird called tarratjan, and requested the lieutenant in charge to wait four days. He replied, naturally, that the Company (government) does not employ birds in making decisions, and while the Dayaks offered no further objection they declared to him that one of them would surely die. According to my informant it so happened that before arriving at the island one man died. If at such a time a large tree should be seen falling, he said, then they would like to give up the trip to New Guinea entirely, but being afraid of the Company they go, notwithstanding the warning.

If a head−hunting party sees a large tree fall, the expedition is abandoned, and no young men who took part can ever join another venture of the same kind. Old and experienced men, after the lapse of a year, may resume operations. In case of meeting a centipede a head−hunting expedition must return immediately to the kampong, and for four years no such enterprise may be undertaken.

The purposes of head−hunting are manifold. The slain man is believed to change into a servant and assistant in the next life. When a chief dies it becomes an essential duty to provide him with heads, which are deposited on his grave as sacrifices, and the souls of which serve him in the next life. Heads taken for the benefit of kampong people are hung in the house of the kapala to counteract misfortune and to confer all manner of benefits. An important point is that the presence of the heads from other tribes, or rather of the souls residing in them, compels evil antohs to depart. A kampong thus becomes purified, free from disease. The killing of a fowl is not sufficient

to accomplish this; that of a pig helps a little, a water−buffalo more, but to kill a man and bring the head makes the kampong completely clean.

With the Katingans a head hanging in the house is considered a far better guardian than the wooden figures called kapatongs, which play an important part in the life of that tribe. Any fear of resentment on the part of the liao (departed soul) residing in the head is precluded by their belief that the Katingan antoh gave him the order to watch.

“If no heads are brought in there will be much illness, poor harvest, little fruit, fish will not come up the river as far as our kampong, and the dogs will not care to pursue pigs,” I was told by a Penihing who had taken part in a head−hunt and served his sentence in Soerabaia. “But are not people angry at losing their heads?” I asked him. “No,” he answered, “we give the heads food on their arrival and every month afterward, and make fire every evening to keep them warm. If they feel cold, then they get angry.” The man who has taken a head is considered a hero by the women, and if unmarried is certain to secure a desirable wife, but it is erroneous to assert that the taking of a head was or is a necessary condition to marriage.

The government of the Dutch Indies, with energy and success, is eradicating the evil head−hunting custom. Military expeditions involving great expense from time to time are sent into remote regions to capture a handful of culprits. By exercising tact it is not difficult finally to locate the malefactors, and indeed the tribe may deliver them. It must be remembered that the Dayaks themselves have no idea that there is anything wrong in taking heads, and the government very wisely does not impose the death penalty, but the transgressor is taken to Soerabaia, on Java, to undergo some years of hard labour—from four to six, I understand. To “go to Soerabaia” is extremely distasteful to the natives, and has proved a most effective deterrent. On account of their forced stay at this remote island city such Dayaks learn to speak Malay and several times I have employed them. They are usually among the best men of the kampong, resourceful, reliable, and intelligent, and may serve also as interpreters.

In his report on a journey to the Katingans in 1909 Captain J.J.M. Hageman says:

“By nature the Dayak is a good−tempered man. The head−hunting should not be charged against him as a dastardly deed; for him it is an adat. In the second place, he possesses very good traits of character, as evidenced by his hospitality and generosity. Our soldiers, some sixty in number, obtained a meal immediately in every kampong. When a Dayak goes on a journey in a friendly region he may be sure of receiving shelter and food in every house.

“They are distrustful of foreigners, but if he has gained their confidence they give assistance freely in every respect. Loving their liberty in a high degree they prefer not to be ordered. The cowardly manner in which they cut heads is no criterion of their courage.”

It would not be in accordance with facts to suppose that head−hunting has altogether been eliminated in Borneo. It is too closely identified with the religious life of the natives, but in time a substitute probably will be found, just as the sacrifice of the water−buffalo supplanted that of slaves. The most recent case that came to my notice on the Mahakam was a Penihing raid from Long Tjehan to the Upper Barito five years previously, in which four Murung heads were taken.

It is extraordinary that such a revolting habit is practised in a race the ethics of which otherwise might serve as a model for many so−called civilised communities, these natives being free to an unusual degree from the fault of appropriating what belongs to others and from untruthfulness. The fact that the Dayaks are amiable in disposition and inclined to timidity renders this phase of their character still more inexplicable. The inevitable conclusion is that they are driven to this outrage by religious influences and lose their self−control. As of related interest I here note what Doctor J.M. Elshout, who had recently returned from Apo Kayan, communicated to me. He had spent three years at the garrison of Long Nawang among the fine Kenyahs and spoke the language. “As soon as one enters upon the subject of taking heads one no longer knows the Kenyah. Of his mild and pacific disposition little or nothing remains. Unbounded ferocity and wantonness, treachery and faithlessness, play a very great part; of courage, as we understand the meaning of the word, there is seldom a trace. It is a victory over the brua (soul) of the man who lost his head, and the slayer's own brua becomes stronger thereby. If opportunity is given they will take heads even if they are on a commercial trip. Outsiders, even if they have been staying a long time in the kampong, run a risk of losing their heads.”

CHAPTER XXV

DEPARTURE FROM THE PENIHINGS—FRUIT−EATING FISH—ANOTHER CALL AT LONG PAHANGEI—A TRIP UP THE MERASI RIVER—GENIAL NATIVES—AN INOPPORTUNE VISIT—THE DURIAN, QUEEN OF ALL FRUITS

It became expedient to prepare for our farther journey down the river, but first I wanted to take some photographs and measurements of the kampong people; this, however, proved an impossible task because of the adverse influence of the reticent and conservative Raja Paron, who spoke not one word of Malay. Recently he had been shocked by the sale to me of two live specimens of the curious spectacled lemur (*tarsius borneanus*), which had been added to my collections. The raja was incensed with the man who sold them, because the makiki, as these animals are called, are regarded as antohs, and in their anger at being sold were making people ill. Therefore these new proceedings for which his sanction was asked were regarded by him with disapproval, and as a result of his opposition the people began to disappear in the direction of their ladangs. Fortunately, I had secured good material in both respects from Long Kai, and I began preparations for departure.

Prahus and a sufficient number of men were secured, and in the middle of July we started. On the Mahakam there never was any difficulty about getting men who were eager to gain their one rupia a day. The difficulty was rather the other way, and this morning the prahus were found to contain more paddlers than had been agreed upon, and seven surplus men had to be put ashore. On the river−banks at this time were noticeable trees bearing small fruit of a yellowish−red colour, and which were so numerous as to impart their hue to the whole tree. Violent movements in the branches as we passed drew our attention to monkeys, which had been gorging themselves with fruit and scampered away on our approach. Birds, naturally, like the fruit, and, strange to say, it is a great favourite with fish, many kinds of which, chiefly large ones such as the djelavat and salap, gather underneath the trees in the season. On the Mahakam and the Katingan this is an occasion for the Dayaks to catch much fish with casting−net, spears, or hooks. The tree, which in Malay is called crevaia, is not cut, and there is no other known to the natives the fruit of which the fish like to eat. Though not sweet, it is also appreciated by the Dayaks.

Another singular observation made on the Mahakam was the effect of dry weather on the jungle. At one place, where it covered hills rising from the river, the jungle, including many big trees, looked dead. From what I later learned about the burning of the peat in Sarawak, where unusually dry weather may start fires which burn for months, this was undoubtedly also the case here, but it seems strange that in a country so humid as Borneo the weather, although admittedly of little stability, may become dry enough to destroy the woods in this manner.

I had decided to pay another short visit to Long Pahangei, where we arrived in the afternoon, and again we were among Oma−Sulings. Some good specimens were added to my ethnographic collections, among them wearing apparel for both sexes said to be over a hundred years old and which I bought from the Raja Besar, who was visiting here. He possessed a number of old implements and weapons of considerable interest. The raja of a near−by kampong arrived on his way to Long Iram, and the largest of his seven prahus was of unusual dimensions, measuring, at its greatest width, 1.34 metres over all. Although the board, four centimetres thick, stands out a little more than the extreme width of the dugout, which is the main part of a prahu, still the tree which furnished the material must have been of very respectable size.

The Raja Besar showed great desire to accompany me on an excursion up the Merasi River, a northern affluent within the domain of the same tribe. My preference was for Lidju, my constant assistant, but on the morning of our start the great man actually forced himself into service, while the former, who had been told to come, was not to be seen. The raja began giving orders about the prahus and behaved as if he were at home. As I remained passive he finally said that he wanted to know whether he could go; if I preferred Lidju he would remain behind. Not wanting a scene, and as he was so intent on going, I gave the desired permission. Though, like the others, he was nude except for a loin−cloth, Raja Besar was a gentleman at heart, but he did not know how to work, especially in a prahu. On account of his exalted position he had never been accustomed to manual labour, but always to command. He naturally selected a place in my prahu and seated himself at one side, which kept the boat tilted; however, it was out of the question for any of the men to correct him. When the prahu moved away the

first thing he did was to wash his feet, next his hands and arms, finally to rinse his mouth, and several times during the trip the performance was repeated. He was of little assistance except through the authority that he exerted as a great raja.

Early in the afternoon we arrived at Lulo Pakko (lulo = river; pakko = edible fern), situated in a beautiful hilly country. The natives very obligingly helped to make camp in the usual way. Raja Besar, who made himself at home in the gallery of the long communal house, told me that he wanted his “children,” as he called the men, to remain until the following day, his plan being to obtain double wages for them. With the swift current, however, they could easily return the same day, so I said I had no objection to their staying, but that they would receive no extra pay for the additional time; whereupon they left without argument.

Comfortably established on the cool, spacious gallery of the large house, I received articles they were willing to sell, had decorative designs interpreted for me, and interviewed the more intelligent of these pleasant Oma−Sulings. On the floor lay an admirably finished plank, which was used as a seat; it was about four centimetres thick and nearly two metres broad, the bark remaining on the edges. In Long Pahangei I noticed a similar one of slightly narrower width.

The women, who were genial in their manners, came to my tent constantly to ask for tobacco, which evidently was a great luxury with them, and sometimes they were even troublesome. One afternoon when all was ready for my bath, which I always take at one side of the tent opening, three young women came and seated themselves just outside. While the natives are always welcome and I like them, yet I was not prepared, after a hard day's work, to relinquish my bath in order to receive a visit from even attractive ones of the fair sex. There was simply nothing to do but to disregard their presence. Calmly I began to take off my clothes, as if the ladies were not there. At first my preparations seemed to make no impression whatever, but finally, when I was about to divest myself of the last of my few garments, they smiled and went away.

This was the season for the durian fruit and we much enjoyed this delicacy, of which Mr. A.R. Wallace, fifty years ago, wrote: “To eat durians is a new sensation, worth a voyage to the East to experience.” There were some superb trees seventy metres high growing not far from my tent, and many others farther away. The people of the Mahakam do not climb these tall trees to get the fruit, but gather them from the ground after it has fallen. One night I heard one fall with a considerable crash. Roughly speaking, it is of the size of a cocoanut; a large one might kill a man and has been known to cause serious injury. It is most dangerous for children to walk under the trees in the fruit season.

The durian is intensely appreciated by the natives, and tatu marks representing the fruit are strikingly prominent in Central Borneo. It also has its European devotees, though most of them take a dislike to it on account of its strong odour, resembling that of decayed onions. On my arrival in Batavia one of my first trips had been to the market to buy a durian, which I brought to the hotel with anticipation of great enjoyment. My disappointment was great, its taste being to me as offensive as its odour. Nobody knows what a durian is like until he eats one that has been permitted to ripen and fall to the ground. Even in Java this would be difficult, unless one made special arrangements with the natives who bring them to the market−places. It is popularly supposed that the durian is an aphrodisiac, but that is not the case. Any food or fruit that one greatly enjoys acts favourably on the digestive organs, and therefore makes one feel in vigorous condition.

Those that were brought to me on this occasion, and which had just fallen from the tree, were of a fresh green colour with a streak of yellow here and there and had a pleasant, rich odour. The most satisfactory way to eat it is with a spoon; the pulp, though rich, is not heavy, and, moreover, is stimulating. It serves the purpose of a dessert, with a flavour and delicacy that is indescribable and that makes one feel happy. Among the great enjoyments of life are the various delicious fruits when really ripe and of the best grade, but comparatively few people have that experience. The vast majority are perfectly satisfied to eat fruit that was picked green and matured afterward. Many years ago I tasted a real orange from New−South−Wales, and ever since I have disdained the more acid kind.

My firmness in refusing to pay the men for more time than was necessary produced a salutary effect upon Raja Besar. He fixed fair prices on things I wanted to buy, which before he had not done, and I made him tie labels on the specimens I bought. As he was truthful, he finally served as well as Lidju. On the last day of our stay he helped me to repress the eagerness of the Dayaks to “turn an honest penny.” The prahus, besides being defective, were not large enough for many men, and I was determined not to have more than three in each, a quite

sufficient number when going downstream. I have a suspicion that he objected to four for reasons of personal safety.

Owing to the rapid current, we made the return voyage in two hours, and when we got to the Mahakam River we found it very much swollen, with logs floating downstream beside us. Our low−lying prahus were leaking and the situation was not agreeable, though I should have felt more anxious had I not been with Dayaks, who are extremely able boatmen. At Long Pahangei the captain from Long Iram, who is also the controleur of that district, had arrived and was waiting on account of the overflow of the river. I had an hour's talk with this pleasant man, who thinks that the Dayaks on the Upper Mahakam ultimately must die out because they do not have enough children to perpetuate the tribe. He said that in 1909, when he was stationed at Puruk Tjahu, nothing was known about the country where we then were.

The Oma−Sulings, according to their traditions, came from Apo Kayan nearly two hundred years ago. Oma means place of abode; Suling is the name of a small river in Apo Kayan. They had at the time of my visit six kampongs on the Upper Mahakam, the largest of which is Long Pahangei, with about 500 inhabitants. Material for clothing is no longer woven, but is bought in Long Iram. This is probably also the case with the Long−Glats, but the Penihings still do some weaving.

CHAPTER XXVI

AMONG THE LONG−GLATS—IS FEAR OF EXPOSURE TO THE SUN JUSTIFIED?—CHARACTERISTICS OF THE LONG−GLATS—GOOD−BYE TO THE MAHAKAM

In the latter part of July we went to the near−by kampong, Long Tujo (“a small animal with many legs"), situated at the mouth of another small tributary to the Mahakam. Here live Long−Glats who are located below the other Bahau peoples of the river and are found as far as Batokelau, between the upper and lower rapids. Though Long Iram is rather distant—five days' travel down−stream, and, if the river is high, perhaps two months may be consumed in returning—still its influence was evidenced by the several umbrellas I saw, all black, an adaptation from the high−class Malays and an unusual sight in these parts. The kapala of this large kampong resembled a Malay raja, in that he always carried an umbrella when he walked and looked pale because the sun was not allowed to shine upon him. Two days later, when I photographed the ladies performing dances, they had at least five of these fashionable contrivances.

It may be stated that natives of the Dutch Indies are generally afraid of the sun. Well−to−do Malays carry umbrellas as a protection against it. In Batavia I read in the newspapers that the Sultan of Priok, when visiting an aviation camp, was so overcome by the heat that he had to be carried away, regaining consciousness on arriving at his quarters. However, the attack may have been induced to some extent by general lack of exercise and the indolent life that characterises his compatriots who occupy high positions.

Even some of the pagan tribes protect their heads, as the Katingans, the Duhoi, and others, who make beautiful sunshades, which also serve in case of rain, and this was not learned from the Malays. In the Bornean tribes that I visited, until the child is old enough to walk, the sun is not allowed to shine upon it even for a moment. The blacks of Australia, on the other hand, who are in a state of absolute nudeness, pay no attention to the sun, though in common with most natives of hot countries they usually prefer to follow the example of the animals and remain quiet in the middle of the day.

An umbrella of the usual type, Chinese or Japanese, is very useful for travel in Borneo. At times it proves of excellent service in the prahu in case of sudden showers, and it is invaluable for protecting the camera when photographing. But as a matter of comfort and convenience it is my custom to have my head uncovered except in rainy or cold weather. The sun is a great friend and health−giver, and notwithstanding well−meant warnings and an inborn fear first to be overcome, during my journeys in Borneo I carried my hat in my pocket. When travelling in a prahu, I do not care for a prolonged exposure to the sun, but often I photographed for three or four hours continuously—really hard work—in the blazing light of the equatorial sun, without experiencing any disagreeable effect. In the spring of 1910 I travelled in this way for three months, mostly on horseback, through the Sonora Desert, and felt stronger for it. It is my opinion that overfatigue, excess in eating, or alcohol are the causes of sunstroke. I have met only one man who, like myself, discards cover for the head—Doctor N. Annandale, of the Indian Museum in Calcutta. Although in our present state of knowledge I agree with him that it is unwise to advise others to do likewise in the tropics, I emphatically recommend less fear of the sun in temperate regions, always on the supposition that one leads a healthy and sane life.

The Long−Glats came from Apo Kayan, and established themselves first on the River Glit, a tributary from the south to the River Ugga, which again is an affluent to the River Boh, the outlet from Apo Kayan to the Mahakam. Since that time the people have called themselves Long−Glit, which is their correct name, but as they have already become known as Long−Glat, through the Dutch, I shall use that designation.

In the kapala's house I saw a superb plank, four metres long, raised lengthwise against the wall; one side of it was taken up with fine carvings on a large scale, representing three pairs of dogs. This I fortunately obtained. The kapala's father was an Oma−Suling, but his grandmother, a Long−Glat, had taught him some kremi or kesa, the Malay words for folklore (in Long−Glat, lawong), and I collected from him two rather interesting tales, which are included with other folklore stories at the end of this book. In one of them (No. 18) the airplane is foreshadowed, and by one that could fly for a month, at that. Needless to state, an airplane had never been heard of in those parts.

The people were inquisitive but more distant than the other tribes I had visited, a quality which is often a saving grace. They were very willing to be photographed, and among my subjects were three women of the

nobility, called rajas, who had many coins sewn on their skirts in a way that looked quite well. One wore a head ornament such as I had not seen before, an elaborate affair lying over the hair, which was worn loose and hanging down the back. One man trembled noticeably when before the camera, without spoiling the photograph, however, though it was a side−view.

Of the women who helped me with the interpretations of designs, one had a marked Mongolian fold of the eye, though her eyes could scarcely be said to be placed obliquely. As far as my observations go, the Mongolian fold is very slight with the natives of Borneo, or not present at all, and the obliquity of the eyes is seldom striking. The Long−Glats do not tatu much, many not at all, but generally they have on the left upper arm a picture of the nagah in its usual representation with the disproportionately large dog's mouth. Wild cattle are not eaten here. The great hornbill, as well as the red and white hawk, may be killed, but are not eaten.

Three times a day the women bring water and take baths, while the men bathe when fancy dictates. Penihing and Kayan women begin to husk rice about five o'clock in the morning, while it is still dark. That is pemali (forbidden) among the Long−Glats, but the women cook rice at that hour, and, after eating, most of the people depart to the ladangs, returning about four o'clock in the afternoon. The women who remain in the kampong place paddi on mats in the sun to dry, and at noon they husk rice. Early in the afternoon, and again about two hours after sunset, meals are served, consisting always of boiled rice and a simple stew of boiled vegetables of one or more kinds (called sayur, a Malay word), and sometimes pork.

In the evening the women may cut rattan into fine strips, or weave these into mats, while the men employ themselves in making a sheath for a parang, or an axe−handle, or carving a hilt for a sword, etc. They talk till late at night and sometimes sing. None of the Bahau people are able to make rattan mats of such exquisite finish as the Long−Glats. The beautiful dull−red colour employed is procured from a certain grass which is crushed and boiled, the rattan being kept in the infusion one day. The black colour is obtained by the same method from the leaves of a tree, and both colours are lasting.

In the belief of the Long−Glats, people should not laugh at animals, lest some misfortune result. For instance, when dogs fight among themselves or with cats, one should not indulge in mirth, else the thunder, which is an antoh, becomes angry and makes somebody ill. In this kampong was a young hornbill which was quite domesticated and frequently came to rest on the top of my tent. It often fought the hens and even the dogs, which was an amusing sight, but would carry disquieting significance to the Dayak who allowed himself to laugh. The lieutenant from Long Kai possessed a very tame wah−wah which had accompanied him on a visit here. The natives told me that a child had become ill because she could not help laughing at the ape when it ran after the lieutenant and climbed one of his legs. According to the blian, the little girl was very warm and feverish, but he sang in the night, and next day she was well.

Considerable similarity is evident in customs, manners, and beliefs of the Long−Glats and the Oma−Sulings, though the limited time at my disposal did not permit me fully to investigate this subject. Bear−meat is not eaten by either, and rusa (deer) and kidyang are not killed, the latter especially being avoided. Sumpitans are bought, and blians' shields such as the Penihings have are not made. Both these tribes pray for many children, which to them means larger ladangs and much food. The wish of these peoples is to have ten children each. In view of the fact that in Long Pahangei the number of women was disproportionately small, the desire for large families seemed unlikely to be gratified. Many men, some of them old, were unmarried, but no women were single. Twins sometimes occur, but not triplets. The mother nourishes her offspring for about five years, the two youngest suckling at the same time. A raja may marry ten women, or more, and has a great marriage−feast of more than a week's duration. Lidju, my Long−Glat assistant, said that his father had fifteen wives, his grandfather thirty, but it was no longer the fashion to have so many. The common man (orang kampong) is allowed only one wife. Divorces are easily obtained, and neither suicide nor abortion is known.

July is supposed to be the dry season, but rarely a day passed without showers. One evening occurred the heaviest thunder−storm I experienced in Borneo. It came from the west and was accompanied by a great downpour, straining my tent to the utmost. The sergeant one day brought in a large lizard (*varanus*) which he shot from the prahu just as it was about to enter the river. Its length was 2.30 metres; the circumference back of the fore legs 44 centimetres.

It was with regret that I said good−bye to the Bahau peoples. Had it been in my power, I should like to have spent years instead of months in this Mahakam region. The Dayaks here are friendly to strangers, and as the great

rapids farther down the river form a natural barrier, they seldom receive visitors, therefore are little changed by outside influence. The Malays have never been able to extend their influence above the rapids, and whatever modification may be noticeable in the natives is chiefly due to their journeys to Long Iram in order to exchange the products of the utan for commodities of the outside world. The government has exerted itself to keep the Malays from coming, but no doubt in the end this will prove as unavailing as it did on the Upper Barito. A few of them now and then find their way across the range that forms a natural boundary toward the south, and although thus far Malay settlement up here is negligible, its ultimate ascendancy is probable, however long the time that may pass before it is accomplished.

CHAPTER XXVII

CONTINUING THE JOURNEY DOWN THE RIVER—GREAT KIHAMS—BATOKELAU—AT LONG IRAM—LAST STAGES OF OUR JOURNEY—ARRIVAL AT SAMARINDA—HINDU ANTIQUITIES—NATIVE'S SUPERIORITY TO CIVILISED MAN

Early in August, as soon as the river had receded sufficiently to be considered favourable for travel, we started in seven prahus with thirty−two men. After less than two hours' swift journey we encountered the advance−guard of the kihams, which, though of little account, obliged us to take ashore almost all our goods, and we walked about fifteen minutes. It seemed a very familiar proceeding. Early in the afternoon we arrived at the kubo, a desirable shelter that had been erected at the head of the first great kiham, but its limited accommodations were taxed to overflowing by our arrival. Already camped here were a few Buginese traders and a raja from the Merasi River, accompanied by two good−looking wives, who were all going to Long Iram and had been waiting two days for the river to fall. The raja, who presented me with some bananas, moved with his family a little farther down the river, and I put up my tent as usual.

Next morning the transportation of our goods on human backs was begun, and shortly after six o'clock I started with the men to walk to the foot of the rapids, which takes about three hours. On the way, I observed a large accumulation of vines and branches heaped round the base of a tall trunk which at first sight looked dead. The tree to all appearances had died, all the branches had fallen, and with them the vines, orchids, ferns, etc., that had lived on it, but after being rid of all this burden it came to life again, for at the top appeared small branches with large leaves. A singular impression was created by the big heap of vegetable matter, not unlike a burial−mound, from the midst of which emerged the tall, straight trunk with the fresh leaves at the top, telling the tale of a drama enacted in the plant world through which the tree had passed triumphantly.

My camping−place was a small clearing on the high river−bank, where I remained two days while the goods were being transported. There had been little rain for a few days; indeed, it is possible the dry season had begun, and the weather was intensely hot, especially in the middle of the day. I catalogued a number of photographic plates, but the heat in my tent, notwithstanding the fly, made perspiration flow so freely that it was difficult to avoid damage. Moreover, I was greatly annoyed by the small yellow bees, which were very numerous. They clung to my face and hair in a maddening manner, refusing to be driven away. If caught with the fingers, they sting painfully.

The river fell more than one metre during the first night, and the Merasi raja's party passed in their prahus at seven o'clock next morning. At twelve our seven prahus showed up, bringing some large packages that could easiest be spared in case anything happened. The following day the remainder of the baggage arrived, carried on the backs of the men, and I was glad to have all here safe and dry.

In a couple of hours we arrived in the kampong Batokelau (turtle), and below are other rapids which, though long, are less of an obstacle. A beautiful mountain ridge, about 1,200 metres high, through which the river takes its course, appears toward the southeast. The population includes fifty “doors” of Busangs, forty “doors” of Malays, and twenty of Long−Glats. Crocodiles are known to exist here, but do not pass the rapids above. The kapala owned a herd of forty water−buffaloes, which forage for themselves but are given salt when they come to the kampong. When driven to Long Iram, they fetch eighty florins each. The gables of the kapala's house were provided with the usual ornaments representing nagah, but without the dog's mouth. He would willingly have told me tales of folklore, but assured me he did not know any, and pronounced Malay indistinctly, his mouth being constantly full of sirin (betel), so I found it useless to take down a vocabulary from him.

Continuing our journey, we successfully engineered a rapid where a Buginese trader two weeks previously had lost his life while trying to pass in a prahu which was upset. Afterward we had a swift and beautiful passage in a canyon through the mountain ridge between almost perpendicular sides, where long rows of sago−palms were the main feature, small cascades on either side adding to the picturesqueness. At the foot of the rapids we made camp in order to enable me to visit a small salt−water accumulation in the jungle a couple of kilometres farther down the river. As we landed near the place, we saw over a hundred pigeons leaving. There were two kinds of these birds at the pool, most of them of a very common large variety, with white head and green wings, and all

were shy; according to the opinion of the Dayaks, owing to the prevalence of rain.

Next morning we started shortly after six o'clock, and early in the afternoon reached the kampong Omamahak, which is inhabited by Busangs, with a sprinkling of Malays. Two hours later twenty−one prahus arrived from Apo Kayan with one hundred and seventy−nine Kenyahs on their way to Long Iram to carry provisions to the garrison. Soon afterward the captain of Long Iram overtook us here, returning from his tour of inspection above, so the place became very populous. The next night we stopped at Hoang Tshirao, inhabited by a tribe of the same name, also called Busang, apparently quite primitive people. The kampong was neat and clean; there were many new wooden kapatongs, as well as small wooden cages on poles, evidently serving for sacrificial offerings. The following day we arrived at Long Iram.

Of comparatively recent origin, the town lies on level land, and its inhabitants outside the garrison are Malays, Chinese, and Dayaks. The street is long, extremely well kept, and everything looks orderly and clean, while before the captain's house were many beautiful flowers. The pasang−grahan, which is in a very quiet locality, is attractive and has two rooms. One was occupied by an Austrian doctor in the Dutch military service, who was on his way to Long Nawang, while I appropriated the other. He was enthusiastic over the superb muscles of the Kenyahs who had just arrived and were camping in a house built for such occasions on top of a small hill a short distance away. Cows, brown in colour, were grazing in a large field near by, and I enjoyed the unusual luxury of fresh milk—five small bottles a day. After I had bathed and put on clean garments, even though my linen−mesh underclothing was full of holes, I felt content in the peaceful atmosphere.

The doctor of Long Iram, who had been here one year, told me that no case of primary malaria had come to his notice. What the Malays call demum is not the genuine malaria, but probably due to the merotu, a troublesome little black fly. One of his predecessors had collected 1,000 mosquitoes, out of which number only 60 were anopheles. There was framboisia here, for which the natives use their own remedies. The temperature at the warmest time of the day is from 90 to 95 Fahrenheit; at night, 75 to 80 . There is much humidity, but we agreed that the climate of Borneo, especially in the interior, is agreeable.

It was extraordinary how everything I had brought on this expedition was just finished. The day before I had had my last tin of provisions; the milk was gone except ten tins, which would carry me through to Samarinda, a four days' journey; the candles were all used; the supply of jam exhausted; tooth−brushes no longer serviceable; my clothes in rags. Fortunately I had more stores in Bandjermasin. The rot−proof tents which I bought in England were to some extent a disappointment because they deteriorated even though not in actual use, or possibly because of that fact. On account of the delay caused by the war the bulk of my considerable tent outfit was not unpacked until two years after purchase. It had been carefully kept, but was found to be more or less like paper, and only a small portion could be used. One tent served me throughout Bornean travels, but finally the quality of the fabric became impaired to a degree which necessitated constant patching; it was made to last only by the exercise of great care and with the aid of a fly, three of these having been used on this expedition. If a journey to a country climatically like Borneo is planned to last only a year, rot−proof tents may be recommended on account of their light weight and great convenience.

The enterprising Kenyahs offered to sell me the model of a raja's funeral−house which seven of them made while there. Most of the material evidently had been brought with them. It was an interesting sample of their handicraft. At the house of the first lieutenant I was shown several similar models, some with unusual painted designs, which were eloquent testimonials to the great artistic gifts of this tribe. I also bought a small earthen jar. One of the natives who was able to speak some Malay said that such ware is common in Apo Kayan and is used for cooking rice. The poison for the dart of the blow−pipe is also boiled in earthenware vessels. The jars, which are sometimes twenty−five centimetres in diameter, are protected on journeys by being encased in rattan netting. The Kenyahs are perhaps the most capable of all the natives of Borneo. Of the one hundred and seventy−nine visiting members of the tribe, only one was afflicted with the skin diseases so prevalent among many of the other Dayaks, and, according to Doctor J. M. Elshout, syphilis is not found among those of Apo Kayan.

The steamship connection with Samarinda is irregular, and as a small transport steamer was making ready to take away its usual cargo of rattan and rubber, I decided to avail myself of the opportunity. The commercial products are loaded in a fair−sized boat, which is made fast to the side of the steamer, and a similar one may be attached to the other side. Such boats, which are called tonkang, also take passengers, mostly Malay and Chinese, but there are no cabins, and the travellers spread their mats on the limited deck according to mutual agreement.

A swarm of Kenyahs began at seven o'clock to convey our baggage, and the soldiers later reported that there was not even standing−room left. I climbed on board and found rattan piled high everywhere, covering even the steps that led up to the “passenger−deck,” where I emerged crawling on all fours. A shelter of duck had been raised for me in one corner, the lieutenant and Mr. Loing placed their beds in the adjoining space, while the soldiers camped next to them. All the natives, packed closely together, formed another row.

The most necessary of my belongings were stored inside the shelter, and there I passed the four days quite comfortably. On account of many noises, including that made by the engine, reading was impossible, so I employed the time in mending two suits of my precious linen−mesh underwear which was rapidly going to shreds, without prospect of opportunity to replace them in the Far East. Morning and afternoon the Malays on deck held their Mohammedan services, apparently singing in Arabic, and during the night the sailors sang much. There were two rough bath−rooms, but I bathed only once, as I was afraid of losing my slippers or other articles that were liable to drop into the river through the intervals between the narrow boards of the floor.

We travelled steadily day and night, but stopped at many kampongs to take on more cargo, and an additional tonkang was attached, which relieved some of the congestion on ours. One afternoon the monotony was relieved by a fight in the kitchen of the little steamer, when a sudden thumping sound of nude feet against the floor was heard and boiled rice flew about. But it was very soon over, evidently only an outburst of dissatisfaction with the cook; somebody called for the Malay captain and we heard no more about it.

There was a Bombay Mohammedan merchant on board who had small stores of groceries and dry−goods on the Kutei River, as the Mahakam is called in its lower course. He also spoke of the hundreds of thousands of Hindus who live in South Africa. On the last day of our journey a remarkably tame young snake bird was brought on board, which one of the sailors bought. According to reports, there are many of these birds on the river. He tied it to the stern railing until night, when he put it on top of the cargo, apprehending that it might try to dive if tempted by the constant sight of the water. When asleep it curled itself up in an extraordinary manner, the long neck at first glance giving it a serpent−like appearance. It cried for fish and showed absolutely no fear.

On August 22, 1916, we arrived at Samarinda. The custom−house authorities permitted me to put our numerous packages in the “bom.” The lieutenant and Mr. Loing went to a new Chinese hotel, while I, in a prahu, paddled to the pasang−grahan, a spacious building with several rooms. Our journey through Central Borneo had been successfully concluded, and during nine months we had covered by river 1,650 kilometres, 750 of these in native boats.

During my absence the great war had become more real to the Archipelago through the occasional appearance in Bornean waters of British and Japanese cruisers. I heard of a German who walked from Bandjermasin to Samarinda because he was afraid of being captured if he went by steamer. The journey took him six weeks. It was my intention, while waiting here a few days for the steamer, to visit a locality farther down the river which is marked on the map as having Hindu antiquities. The kapala of the district, who had been there, was sent for, and as he said that he had neither seen nor heard of any such relics, which probably would have to be searched for, I relinquished the trip. Hindu remains, which locally were known to be present in a cave north of Samarinda, had been visited in 1915 by the former assistant resident, Mr. A.W. Spaan, whose report on the journey was placed at my disposal. The cave is in a mountain which bears the name Kong Beng, Mountain of Images, due probably to a local Dayak language. It lies in an uninhabited region four days' march west of Karangan, or nearly two days' east of the River Telen, the nearest Dayaks, who are said to be Bahau, living on the last−named river. During the time of Sultan Suleiman six or seven statues were taken from Kong Beng to Batavia and presented to the museum there.

The country traversed from the River Pantun, to follow Mr. Spaan's account, at first is somewhat hilly, changes gradually into undulating country, and finally into a plain in the middle of which, quite singularly, rises this lonely limestone mountain, full of holes and caves, about 1,000 metres long, 400 broad, and 100 high, with perpendicular walls. The caves are finely formed and have dome−shaped roofs, but few stalactite formations appear. Thousands of bats live there and the ground is covered with a thick layer of guano. From the viewpoint of natural beauty these caves are far inferior to the well−known cave of Kimanis in the Birang (on the River Berau, below the Kayan) with its extraordinarily beautiful stalactite formations. In one of the caves with a low roof were found eleven Hindu images; only the previous day the regent of Kutei had turned the soil over and recovered a couple more archaeological remains. Ten of these relics are in has−relief and about a metre high. The eleventh,

which is lower, represents the sacred ox and is sculptured in its entirety. One bas−relief from which the head had been broken struck the observer as being finely executed; he recognized four Buddhas, one Durga, and one Ganesha.

Another cave visited was noteworthy on account of a strong wind which continually issues from it and for which he was unable to account. The current is formed in the opening, and twenty−five metres back of it there is no movement of the atmosphere. The cave is low, but after ten minutes' walk it becomes higher and has connection with the outside air. There it is very high, and the sun's rays falling in produced a magnificent effect, but no wind was noticeable there. Standing in front of this cave a strange impression was created by the sight of leaves, branches, and plants in violent movement, while outside there was absolutely no wind.

I should much have liked to visit Kong Beng, but circumstances prevented my doing so, though the assistant resident, Mr. G. Oostenbroek, courteously offered his small steamer to take me up along the coast. Some months later an American friend, Mr. A.M. Erskine, at my instigation made the journey, and according to him it would take a month to properly explore the locality. The man whom the Sultan of Kutei sent with him threw rice on the statues, and the accompanying Dayaks showed fear of them. By digging to a depth of about a metre and a half through the layer of guano, a pavement of hewn stone was found which rested on the floor of the cave. That the trip proved interesting is evident from the following description submitted to me:

“The weird experience of those two nights and one day in the huge caves of Kong Beng can never be forgotten. The caves were so high that my lanterns failed to reveal the roof. There were hordes of bats, some of them with wings that spread four feet. The noise of their countless wings, upon our intrusion, was like the roar of surf. Spiders of sinister aspect that have never seen the light of day, and formidable in size, were observed, and centipedes eight or nine inches long. In places we waded through damp bat guano up to our knees, the strong fumes of ammonia from which were quite overpowering.

“Far back in one of the caverns were those marvellous Hindu idols, beautifully carved in bas−relief on panels of stone, each with a projection at the bottom for mounting on a supporting pedestal. They represent the Hindu pantheon, and are classic in style and excellent in execution. They are arranged in a half−circle, and high above is an opening to the sky which allows a long, slanting shaft of light to strike upon their faces. The perfect silence, the clear−cut shaft of light—a beam a hundred feet long—drifting down at an angle through the intense darkness upon this group of mysterious and half−forgotten idols, stamps a lasting picture upon one's memory.

“It is the most majestic and strangely beautiful sight I have ever seen. Coming upon the noble group of gods gazing at the light, after a long dark walk through the cave, gives one a shock of conflicting emotions quite indescribable. One hardly dares to breathe for fear of dispelling this marvellous waking dream. Fear and awe, admiration and a sense of supreme happiness at having a wild fancy turn to reality, all come over one at once. A single glance at this scene was ample reward for all the long days and nights of effort put forth to reach it. I never again expect to make a pilgrimage of this sort, for only one such experience can be had in a lifetime.”

It is rather surprising that Hindu remains in Borneo should be found at such an out−of−the−way place, but Doctor Nieuwenhuis found stone carvings from the same period on a tributary to the Mahakam. Remains of Hindu red−brick buildings embedded in the mud were reported to me as existing at Margasari, southwest of Negara. Similar remains are said to be at Tapen Bini in the Kotawaringin district.

In 1917, at the Dayak kampong Temang, in the district of that name, Mr. C. Moerman, government geologist, saw a brass statue fifteen centimetres high, which appeared to him to be of Hindu origin. Before being shown to visitors it is washed with lemon (djeruk) juice. When on exhibition it is placed on top of rice which is contained in a brass dish more than twenty−five centimetres in diameter. After being exhibited it is again cleaned with lemon−juice and then immersed in water which afterward is used as an eye remedy. One must give some silver coin for the statue to “eat.” Its name is Demong (a Javanese word for chief) Akar. Originally there were seven such Demongs in that country, but six have disappeared.

Hindu influence is evident among the Dayaks in the survival of such names as Dewa and Sangiang for certain good spirits. In the belief of the Katingans, the departed soul is guarded by a benevolent spirit, Dewa, and it is reported from certain tribes that female blians are called by the same name. A party of Malays caught a snake by the neck in a cleft of a stick, carried it away and set it free on land instead of killing it, but whether this and similar acts are reminiscent of Hindu teaching remains to be proven.

At the end of August we arrived in Bandjermasin, where several days were spent in packing my collections.

For many months I had been in touch with nature and natural people, and on my return to civilisation I could not avoid reflective comparisons. Both men and women of the Mahakam have superb physiques; many of them are like Greek statues and they move with wonderful, inborn grace. When with them one becomes perfectly familiar with nudity and there is no demoralising effect. Paradoxical as it may sound, the assertion is nevertheless true, that nothing is as chaste as nudity. Unconscious of evil, the women dispose their skirts in such fashion that their splendid upper bodies are entirely uncovered. Composed of one piece of cloth, the garment, which reaches a little below the knee and closes in the back, passes just over the hips, is, as civilised people would say, daringly low. It is said that the most beautiful muscles of the human body are those of the waist, and among these natives one may observe what beauty there is in the abdomen of a well−formed young person.

It is an undeniable fact that white men and women compare unfavourably with native races as regards healthful appearance, dignity, and grace of bearing. We see otherwise admirable young persons who walk with drooping shoulders and awkward movements. Coming back to civilisation with fresh impressions of the people of nature, not a few of the so−called superior race appear as caricatures, in elaborate and complicated clothing, with scant attention to poise and graceful carriage. One does not expect ladies and gentlemen to appear in public in “the altogether,” but humanity will be better off when healthful physical development and education of the intellect receive equal attention, thus enabling man to appear at his best.

CHAPTER XXVIII

AN EARTHQUAKE—ERADICATING THE PLAGUE—THROUGH THE COUNTRY NORTHEAST OF BANDJERMASIN—MARTAPURA AND ITS DIAMOND−FIELDS—PENGARON—THE GIANT PIG—THE BUKITS—WELL−PRESERVED DECORATIVE DESIGNS—AN ATTRACTIVE FAMILY

I decided to travel more in Borneo, but before undertaking this it was necessary for several reasons to go to Java. In Soerabaia I had my first experience of an earthquake. Shortly before two o'clock, while at luncheon in the hotel, a rather strong rocking movement was felt, and I looked at the ceiling to see if there were cracks which would make it advisable to leave the room. But it lasted only a few seconds, although the chandeliers continued to swing for a long time. At other places clocks stopped, and I read in the papers that the vibration passed from south to north, damaging native villages. In one town the tremors lasted three minutes and were the worst that had occurred in thirty−four years, but when the disturbance reached Soerabaia it was far less severe than one experienced in Los Angeles, California, in April, 1918.

As is well known, the government of the Dutch Indies expends millions in eradicating the plague, which is prevalent in portions of eastern Java. In addition to exterminating the rats, it is necessary to demolish the bamboo huts of the natives and move the inhabitants to new quarters. Houses of wood are erected, lumber for the purpose being imported from Borneo in great quantities. That the efforts have been crowned with success is indicated from the reports issued in 1916, showing that plague cases had been reduced seventy per cent.

Returning to Bandjermasin toward the end of October, I began to make arrangements for a journey to Lok Besar, in a hilly region of the Northeast at the source of the Riam Kiwa River. This kampong had recently been visited by the government's mining engineer, Mr. W. Krol, on one of his exploring expeditions. At first glance it might seem unpromising to make researches in a region so near to a stronghold of the Malays, but as he was the first and only European who had been in the upper country of that river, there was a fair chance that the natives might prove of considerable interest. It was a matter of five or six days by prahu from Bandjermasin, followed by a three days' march, and I decided to return by a different route, cross the mountain range, and emerge by Kandangan.

Accompanied by Mr. Loing, the surveyor, and the soldier−collector, I started from Bandjermasin on November 1. To travel by the canal to Martapura can hardly be regarded as a pleasure−trip, as mosquitoes and flies are troublesome. Half a year later I went by the road to the same place under more cheerful conditions, and though the day was overcast, the flooded country just north of the town presented a picturesque appearance. Rows of high−gabled Malay houses, with narrow bridges leading out to them, were reflected in the calm water, and beautiful blue morning−glories covered the small bushes growing in the water. Along the road were forests of *melalevca leucodendron,* of the family of *myrtaceae,* from which the famous cajuput−oil is obtained. It is a very useful, highly aromatic, and volatile product, chiefly manufactured in the Moluccas, and especially appreciated by the Malays, who employ it internally and externally for all ailments. They are as fond of cajuput−oil as cats are of valeriana.

Early in the afternoon the prahus landed us at Martapura, which is renowned for its diamonds and once was the seat of a powerful sultanate. The fields, which have been known for a long time, cover a large area, and the diamonds found in gravel, though mostly small and yellow, include some which are pronounced to be the finest known to the trade. There is always water beneath the surface, and natives in bands of twenty occupy themselves in searching for the precious stones, digging holes that serve besides as self−filling basins in which the gravel is panned. The government does not work the fields. In a factory owned by Arabs the diamonds are cut by primitive but evidently very efficient methods, since South African diamonds are sent here for treatment, because the work can be done much cheaper than in Amsterdam.

The controleur, Mr. J.C. Vergouwen, said that there were 700 Dayaks in his district. He was able to further my plans materially by calling a Malay official who was about to start in the same direction for the purpose of vaccinating the natives some distance up country. The kapala of the district, from Pengaron, who happened to be there, was also sent for, and both men were instructed to render me assistance. Next day the Malay coolies carried our baggage to the unattractive beach near the market−place, strewn with bones and refuse, loaded our goods in

the prahus, and the journey began. The men were cheap and willing but slow, and it was near sunset when we arrived at the English rubber plantation near Bumirata.

The controleur had been friendly enough to send word to the manager that he had invited me to stay overnight at the estate. However, upon arrival there we were told that the manager had gone to Bandjermasin the day before, but was expected back at seven o'clock. It did not seem the proper thing to make ourselves at home in his absence, so we returned to the kampong, five minutes below by prahu, to make camp in a spacious, rather clean−looking, shed that formed the pasar or market−place.

At midnight I was awakened by the halting of an automobile and a Malay calling out, “Tuan! Tuan!” and I stepped from my bed to meet a friendly looking man in a mackintosh, who proved to be Mr. B. Massey, the manager. We talked together for an hour in the calm of a Bornean night. What he said about the irregularity of the climatic conditions interested me. Two years previously it had been so dry for a while that prahus could move only in canals made in the river−bed. His friends had thought him mad to come to Borneo, but he liked the climate better than that of Java. His kind invitation to breakfast I declined with regret, because when one is travelling it is very troublesome to change clothing, shave, and appear civilised.

We arrived at Pengaron at noon. The kapala of the district, a Malay with the title of kiai, lived in a comfortable house formerly occupied by a controleur, one room serving the purpose of a pasang−grahan. On our arrival he was at the mosque, but returned in an hour. The vaccinateur was already there, and by a lucky chance Ismail made his appearance, the kapala from Mandin, whom the controleur thought would be useful, as he had influence with Malays and Dayaks. The kiai, a remarkably genial man, was the most agreeable Malay I met. He behaved like an European, bathed in the bathroom, *a la* Dutch, dressed very neatly, and had horses and carriage. The hours were told by a bell from four o'clock in the morning, and two clocks could be heard striking, one an hour ahead of the other.

In the afternoon, Mr. Krol, the mining engineer, returned from a trip of a month's duration, wearing a pedometer around his neck. He had walked twenty miles in the jungle that day. A Dayak who had accompanied him from Pa−au, one day's march toward the east, gave me some information about the giant pig, known to exist in Southern Borneo from a single skull which at present is in the Agricultural High School Museum of Berlin. During my Bornean travels I constantly made inquiries in regard to this enormous pig, which is supposed to be as large as a Jersey cow. From information gathered, Pa−au appears to be the most likely place where a hunt for this animal, very desirable from a scientific point of view, might be started with prospect of success. An otherwise reliable old Malay once told me about a pig of extraordinary size which had been killed by the Dayaks many years ago, above Potosibau, in the Western Division. The Dayaks of Pa−au, judging from the one I saw and the information he gave, are Mohammedans, speak Malay, and have no weapons but spears.

The vaccinateur started in advance of us to prepare the people for our arrival. Our new paddlers, who were jolly and diligent men, brought their rice packed in palm−leaves, one parcel for the men of each prahu. They use leaves of the banana even more frequently for such purposes, as also do Javanese and Dayaks, and spread on the ground they form a neat and inviting setting for the food, serving the purpose of a fresh table−cloth. The men ate rapidly with their fingers and afterward drank water from the kali (river), throwing it into the mouth with the hand, as is the Malay custom. I did not notice that they brought dried fish, which is the usual complement to a meal. In this section of the country there is much admixture of blood between Dayaks and Malays, which accounts for the fact that the latter are more genial and agreeable than their lower classes usually are. At Pinang the small population turned out in full force, standing picturesquely near the mosque on an open space between the cocoanut−trees that grew on the high river−bank. It was evident that visitors are not often seen there.

At Belimbing the usually steep, high river−bank had been made accessible by short sticks so placed as to form steps that led up almost perpendicularly. Great was my surprise to find myself facing an attractive little pasang−grahan, lying on grassy, level ground at almost the same height as the tops of the cocoanut and pinang palms on the other side of the river. It was a lovely place and charmingly fresh and green. The house, neatly built of palm−leaves, contained two rooms and a small kitchen, with floors of bamboo. In the outer room was a table covered with a red cloth and a lamp hung above it, for the Malays love the accessories of civilisation. The kapala and the vaccinateur were there to receive us, and we were treated as if we were officials, two men sleeping in the house as guard. I was told there are no diseases here except mild cases of demum (malaria) and an itching disorder of the skin between the fingers.

On the fourth day from Martapura we arrived at the first Dayak habitation, Angkipi, where Bukits have a few small bamboo shanties consisting of one room each, which were the only indications of a kampong. The most prominent feature of the place was a house of worship, the so−called balei, a square bamboo structure, the roomy interior of which had in the centre a rectangular dancing−floor of bamboo sticks. A floor similarly constructed, but raised some twenty−five centimetres higher, covered about all the remaining space, and serves as temporary habitations for the people, many small stalls having been erected for the purpose. Our friend the vaccinateur was already busy inside the building, vaccinating some fifty Dayaks from the neighbouring hills and mountains who had responded to his call. When I entered, they showed timidity, but their fears were soon allayed, and I made myself at home on the raised floor, where I had a good camping−place.

Although these Bukits, among whom I travelled thereafter, are able to speak Malay, or Bandjer, the dialect of Bandjermasin, they have preserved more of their primitive characteristics than I expected. As I learned later, at Angkipi especially, and during a couple more days of travel, they were less affected by Malay influence than the Dayaks elsewhere on my route. The kampong exists only in name, not in fact, the people living in the hills in scattered groups of two or three houses. Rice is planted but once a year, and quite recently the cultivation of peanuts, which I had not before observed in Borneo, had been introduced through the Malays. Bukits never remain longer than two years at the same house, usually only half that time, making ladang near by, and the next year they move to a new house and have a new ladang. For their religious feasts they gather in the balei, just as the ancient Mexicans made temporary habitations in and near their temples, and as the Huichols and other Indians of Mexico do to−day.

The natives of Angkipi are stocky, crude people. Several had eyes set obliquely, *a la* Mongol, in a very pronounced manner, with the nose depressed at the base and the point slightly turned upward. Among the individuals measured, two young women were splendid specimens, but there were difficulties in regard to having them photographed, as they were all timid and anxious to go home to their mountains.

Next day, marching through a somewhat hilly country, we arrived at the kampong Mandin on the River Lahanin. Here was the residence of Ismail, to whose influence probably was due the recent conversion to Islam of several families. The pasang−grahan, though small, was clean and there was room for all. Thanks to the efforts of the vaccinateur, the Dayaks, who were very friendly, submitted to the novel experience of the camera and kept me busy the day that we remained there. A great number of women whom I photographed in a group, as soon as I gave the signal that it was all over, rushed with one impulse to the river to cleanse themselves from the evil effects of the operation.

As the Bukits are not very strong in carrying burdens, we needed fifty carriers, and Ismail having assisted in solving the problem, the march was continued through a country very much cut up into gulches and small hills. Time and again we crossed the Riham Kiwa, and went down and up gullies continually. At a small kampong, where I took my midday meal sitting under a banana−tree, the kapala came and in a friendly way presented me with a basket of bananas, for these Dayaks are very hospitable, offering, according to custom, rice and fruit to the stranger. He told me that nearly all the children were ill, also two adults, but nobody had died from a disease which was raging, evidently measles.

At Ado a harvest−festival was in progress in the balei, which, there, was of rectangular shape. Within I found quite elaborate preparations, among which was prominently displayed a wooden image of the great hornbill. There was also a tall, ornamental stand resembling a candelabrum, made of wood and decorated with a profusion of long, slightly twisted strips of leaves from the sugar−palm, which hung down to the floor. From here nine men returned to our last camping−place, where they had left a similar feast in order to serve me. The harvest−festival is called bluput, which means that the people fulfil their promise to antoh. It lasts from five to seven days, and consists mostly of dancing at night. Neighbouring kampongs are invited and the guests are given boiled rice, and sometimes babi, also young bamboo shoots, which are in great favour and are eaten as a sayur. When the harvest is poor, no feast is made.

The balei was very stuffy, and little light or air could enter, so I continued my journey, arriving later in the afternoon at Beringan, where a tiny, but clean, pasang−grahan awaited us. It consisted mainly of four small bamboo stalls, in which there was room for all of us to sleep, but the confined air produced a disagreeable congestion in my head the next day. We now had to send for men to Lok Besar, which was our ultimate goal, and the following day we arrived there, passing through a country somewhat more hilly than hitherto. I put up my tent

under some bananas, and felt comfortable to be by myself again, instead of sleeping in crowded pasang−grahans. There was not even such accommodation here, but the kapala put most of his little house at our disposal, reserving only a small room and the kitchen for himself and family. The boiling−point thermometer showed an elevation of 270 metres.

I had a meeting with the blians, who knew nothing worth mentioning. Almost everything had been forgotten, even the language, still it is remarkable how primitive these people remain, and there is scarcely any mixture of Malay apparent in the type. For two or three days the kind−hearted, simple people gathered in numbers at the middle kampong of the three which bear the same name, Lok Besar, upper, middle, and lower. The Dayaks call the upper one Darat, which means headwaters.

One man had a skin formation which at a superficial glance might be taken for a tail. It was about the size of a man's thumb, felt a little hard inside, and could be moved either way. On the outside of each thigh, over the head of the femur, was a similar but smaller formation. Another man had an excrescence on each thigh, similarly located, but very regular in shape, forming half a globe; I saw a Dayak on the Mahakam with the same phenomenon. One woman had such globular growths, though much smaller, in great numbers on the feet.

Among the Bukits I observed two harelipped men, one hunchback, and an unusual number of persons with goitre. These natives drink water by the aid of a leaf folded into an improvised cup. Eight of the upper front teeth are cut. Suicide is not known. Their only weapon at present is the spear, which they buy very cheaply from the Malays, but formerly the sumpitan was also in use. To hunt pig they have to go some distance into the mountains; therefore, they seldom undertake it. Honey is gathered by climbing the tree in which the bees' nest is discovered. Bamboo pegs are inserted in the trunk at intervals and a rope made from a certain root is tied between them, thus forming a ladder upon which the natives ascend the tree at night. The women make rattan mats, and also habongs or receptacles in which to carry the mats when travelling.

Fire is extinguished for the night. These natives sleep on a single mat, made from either bamboo or rattan, and usually nothing is placed under the head, but sometimes small wooden blocks are used. In the morning when they arise they roll the mats, and the chamber−work is done. A young girl whom I measured had her hair fastened up with the quill of a porcupine; when asked to undo her hair, she put the quill under the top of her skirt. The Bukits possess one musical instrument, sarunai, a kind of clarinet, which does not sound badly. There are many blians, nearly all men. Several prominent members of the tribe asserted that head−hunting was never practised—at least there is no tradition concerning it.

A man may have one, two, or three wives. When a young man is poor, he pays two ringits or two sarongs to his bride's father, but half that amount is sufficient for a woman no longer youthful. The usual payment appears to be twelve ringits or twelve sarongs, which the blian at the wedding places on top of his head, while with his right hand he shakes two metal rings provided with rattles. On the Barito I noted the same kind of rattles used on a similar occasion. He asks Dewa not to make them ill, and a hen as well as boiled rice is sacrificed to this antobu. The dead are buried in the ground as deep as the height of a man. Formerly the corpse was placed in a small bamboo house which rested on six upright poles, and on the floor a mat was spread.

I was pleasantly surprised one day when a Dayak arrived at our kampong bringing a number of attractive new bamboo baskets which he had bought on the Tappin River, near by to the west. He was going to finish them off by doing additional work on the rims and then carry them to Kandangan, where they would fetch about one guilder each. All were of the same shape, but had different designs, and he knew the meaning of these—there was no doubt about it—so I bought his entire stock, thirteen in number. I learned that most of the people were able to interpret the basket designs, but the art of basket−making is limited, most of them being made by one or two women on the Tappin. A very good one, large and with a cover, came from the neighbouring lower kampong. An old blian sold it to me, and his wife softly reproved him for so doing, but when I gave her ten cents as a present she seemed very well satisfied.

For the interpretation of these designs I found an excellent teacher in a gentlewoman from the lower kampong. She had extensive knowledge concerning this matter, an impression later confirmed by submission of the baskets to another woman expert from the Tappin, of repute as a maker and for knowledge of the designs. I hope that in due time my informant will receive the photograph of herself and her boys which I shall send to her in grateful recognition of her valuable assistance. Her name was Dongiyak, while her good husband was called Nginging. She had two attractive and extremely well−behaved sons of twelve and fourteen years, who trusted implicitly in

her and showed absolute obedience, while she was kindness itself coupled with intelligence. In fact their relations were ideal, and it seemed a pity that these fine boys should grow to manhood and die in dense ignorance.

I doubt whether any traveller, including the honest missionary, disagrees with the terse sentence of the great Wallace in *The Malay Archipelago*: “We may safely affirm that the better specimens of savages are much superior to the lower examples of civilised peoples.” Revolting customs are found, to be sure, among native races, but there are also redeeming virtues. Is there a so−called Christian community of which it may be truly said that its members do not steal, as is the case with the majority of Dayak tribes? There are savage races who are truthful, and the North American Indians never broke a treaty.

In the morning, when beginning my return journey, I had to send more than once to the kampong below to ask the men to come, because of their reluctance to carry burdens. We had to proceed slowly, and early in the afternoon reached the summit of the watershed, which naturally is not at its highest here, the elevation ascertained by boiling−point thermometer being 815 metres. At a temperature of 85 F., among shady trees, a short rest was very acceptable, and to get down the range proved quick work as the woods were not dense. Afterward we followed a path through tall grass over fallen trunks, crossing numerous gullies and rivulets. As darkness approached, clouds gathered threateningly and rain began to fall. It was really a pleasure to have the kapala of Tumingki meet us a couple of kilometres before arriving there. A man whom I had sent ahead to the river Tappin for the purpose of securing more baskets and to bring a woman to interpret the designs, had evidently told him about us.

CHAPTER XXIX

THE BALEI OR TEMPLE—A LITTLE KNOWN PART OF THE COUNTRY—A COURTEOUS MALAY—POWER OVER ANIMALS—NEGARA

The kapala cleared the way with his parang, and just before dusk we arrived at the balei, a large structure which the people had taken as a permanent abode, having no houses and possessing ladangs near by. Many fires were burning inside, round which the families had gathered cooking rice, and my entire party also easily found room. The kapala at once sent out five men to gather the necessary coolies for the continuance of our journey the following day.

The carriers were slow in coming, and while waiting in the morning I catalogued four baskets which my messenger had brought from Tappin and a few more which I was able to buy here. The woman from Tappin, who accompanied my man, was even better informed than Dongiyak. She knew designs with remarkable certainty, and it was gratifying to be able to confirm information gathered before, also in two instances to correct errors. Many of the designs seemed familiar to the men standing around, for they, too, without being asked, would sometimes indicate the meaning correctly.

This done, I again inspected the balei, accompanied by the kapala who himself was a blian; he and the others were perfectly willing to give any information about customs and beliefs, although equally unable to do so. The dancing space in the middle was rectangular, about eight metres long, lying nearly east and west. It was about thirty centimetres lower than the remainder of the floor, on which I counted nineteen small rooms, or rather stalls. In the middle of the dancing place was a large ornamental stand made of wood, twice as high as a man, from which were hanging great quantities of stripped palm leaves. From the western part of the stand protruded upward a long narrow plank, painted with simple curved designs representing nagah, the great antoh, shaped like a serpent and provided with four short curved fangs stretched forward. The people could not be induced to sell the effigy because it was not yet one year old.

The country was uneven and heavy for travelling, or, as the carriers expressed it, the land was sakit (Malay for “ill"). There were more mountain ranges than I expected, rather low, though one we got a fine view of two quite impressive mountains. Here and there on the distant hillsides ladangs were seen and solitary houses could be discerned. On our arrival in the first kampong we were hospitably offered six young cocoanuts, considered a great delicacy even among white people. Although I do not much appreciate the sweetish, almost flavourless water of this fruit, they proved very acceptable to my men, as the day was intensely hot for Borneo.

At the kampong Belimbing, by taking out on of the walls which were constructed like stiff mats, I obtained a good room in the pasang grahan, but the difficulty about getting men increased. The kapala, or pumbakal, as this official is called in these parts, was obliging and friendly, but he had slight authority and little energy. He personally brought the men by twos and threes, finally one by one, and he worked hard. When finally we were able to start, still a couple of men short, he asked to be excused from accompanying me further, to which I readily assented. There were too many pumbakals who graced the expedition with their presence. I believe we had four that day who successively led the procession, generally with good intentions to be of assistance, but, in accordance with their dignity, carrying little or nothing, and receiving the same payment as the rest. However, it must be conceded that their presence helped to make an impression on the next kampong which was expected to furnish another gang of carriers.

We managed to travel along, and finally reached the last Dayak kampong, Bayumbong, consisting of the balei and a small house. The balei was of limited proportions, dark, and uninviting, so I put up my tent, which was easily done as the pumbakal and men were friendly and helpful. All the carriers were, of course, anxious to return, but as they were engaged to go to Kandangan I told them they would have to continue, promising, however, to pay for two days instead of one and to give them all rice in the evening. These people are like children, and in dealing with them a determined but accommodating ruling is necessary.

The journey was less rough than before, though we still passed gulches over which bamboo poles afforded passage for a single file, and soon the road began to be level. It was not more than four or five hours' walk to Kandangan, but rain began to fall and the men each took a leaf from the numerous banana trees growing along the

road with which to protect themselves. On approaching the village we found two sheds some distance apart which had been built conveniently over the road for the comfort of travelling “inlanders.” As the downpour was steady I deemed it wise to stop under these shelters, on account of the natives, if for no other reason, as they are unwilling carriers in rain.

The house of a Malay official was near by, and after a few minutes he came forth in the rain, a servant bringing a chair which he offered to me. Feeling hungry, I inquired if bananas were purchasable, but without immediate result. He was naturally curious to know where I came from, and having been satisfied in that respect he went back to his house, soon returning with bananas and a cup of tea. Hearing that I had been three weeks without mail and was anxious to have news of the war, he also brought me two illustrated Malay periodicals published in Amsterdam. Alas! they were half a year old, but nevertheless, among the illustrations were some I had not seen before. This was a worthy Malay and not unduly forward—he was too well−mannered for that.

The rain having abated somewhat we soon found ourselves in Kandangan, where the curiosity of Malays and Chinese was aroused by our procession. Neither the assistant−resident nor the controleur were at home, but the former was expected next morning. Many Malays, big and little, gathered in front of the pasang grahan, where the man in charge could not be found, but a small boy started in search of him. After half−an−hour the rest of our party began to come in, and forty−five wet coolies with their damp burdens filled the ante−room of the pasang grahan, to the despair of the Malay custodian who belatedly appeared on the scene. Notwithstanding the unpleasantness of the crowded room I did not think it right to leave the poor carriers out in the rain, therefore had allowed them to remain. The burdens having been freed from the rattan and natural fibrous bands by which they had been carried, these wrappings—a load for two men—were disposed of by being thrown into the river. Gradually the place assumed an orderly aspect and Mr. Loing and I established ourselves in two quite comfortable rooms.

Through fortunate circumstances the assistant−resident, Mr. A.F. Meyer, was able to arrange to have our old acquaintance, the river−steamer *Otto,* to wait for us at Negara and take us to Bandjermasin. His wife had an interesting collection of live animals and birds from the surrounding country. She loved animals and possessed much power over them. A kitten of a wild cat of the jungle, obtained five days previously, was as tame as a domesticated specimen of the same age. She stroked the back of a hawk which was absolutely quiet without being tied or having its wings cut. He sat with his back toward us and as she stroked him merely turned his head, immediately resuming his former position. All the birds were in perfect plumage at that time, the month of November, and in fine condition.

We came to a number of beautiful rails, males and females, from the large marshes of the neighbourhood; the birds were busily running about, but at sight of her they stopped and emitted clacking notes. From the same marshes had been obtained many small brownish ducks with exquisitely shaded coats. The snake bird, with its long, straight, sharp beak and long, thin neck, she said was dangerous, and she teased him to thrust his head through the rails. Finally she took from a cage two musangs which were resting and pressed them against her chest. They were as tame as cats. It was curious to note that when walking they held their tails so that a loop was formed in the middle.

In Negara are many high−gabled houses, which I was told are Bandjermasin style; at all events, they form the original Malay architectural pattern in Borneo. The town is strongly Malay and famous for its boat−building. The gondola−like boats of ironwood that attract the attention of the stranger on his first visit to Bandjermasin, come from this place. Mosquitoes were troublesome in the surrounding marshes; nevertheless, I understand there is no malaria.

In this and similar sections in the vicinity of Bandjermasin it is noticeable that Malay women and girls whiten their faces on special occasions, doubtless in imitation of Chinese custom. The paint, called popor, is made from pulverised egg−shells mixed with water, and, for the finest quality, pigeons' egg−shells are utilised. Where there is much foreign influence Dayak women have adopted this fashion for festal occasions. At harvest time, when both Dayak and Malay women wear their best garments, the faces of the women and the little girls are painted.

My expedition of three weeks had proved successful mainly on account of the unexpectedly well−preserved knowledge of decorative designs which I encountered among the Bukits. Otherwise they are slowly but surely yielding to the Malay influence to which they have been exposed for hundreds of years. Only the comparative inaccessibility of the country has prevented their complete absorption.

CHAPTER XXX

AN EXPEDITION TO THE KATINGAN RIVER—TATUING OF THE ENTIRE BODY—THE GATHERING OF HONEY—A PLEASANT INTERMEZZO—AN UNUSUALLY ARTISTIC PRODUCTION—UP THE SAMBA RIVER—WITH INCOMPETENT BOATMEN

Arrangements were at once begun for another expedition, this time to the west of Bandjermasin. I planned to ascend the Mendawei, or Katingan River, as it is also called, and, if circumstances permitted, cross over to the headwaters of the Sampit, returning by that stream. Through the kind efforts of the resident, Mr. H.J. Grijson, arrangements were made that would enable me to use the government's steam−launch *Selatan* as far up the river as it is navigable, to Kuala Samba, and in case necessity arose, to have it wait for my return. This arrangement would save much time.

Accompanied by Mr. Loing, the surveyor, on the last day of November I left Bandjermasin on the steamship *Janssens*, which, en route for Singapore, was to call at Sampit. There is always a large contingent of Malays who with their families go on this steamer to and fro between Borneo and the Malay Peninsula, where they work on rubber and cocoanut plantations; out of their earnings they buy the desires of their hearts—bicycles and yellow shoes. Thus equipped they go back to Bandjermasin to enjoy themselves a few weeks, after which the bicycles are sold and the erstwhile owners return to the scene of their labours to start afresh.

The controleur, Mr. H.P. Schouten, had just returned on the *Selatan* from a trip up the Katingan, and turned it over to my use. When the coaling had been done and our goods taken on board, the strong little boat lay deep, but the captain said it was all right. He was the same able djuragan of two years before. Having received from the controleur letters to the five native officials located on the Katingan, we departed, and the following morning arrived at the mouth of the river. At first the country was very thinly inhabited, because the banks are too low to encourage settlement. As hitherto noted the country bordering on the lower portions of the great rivers is populated by Malays exclusively, and here their territory stretches almost to Kasungan. The remainder of the riparian lands is occupied by Katingans. There is some slight difference in the language spoken by those who live on the middle part, from Kasungan to Bali (south of Kuala Samba), and those who from Bali northward occupy the rest of the watercourse. They are termed by the Malays Lower and Upper Katingans. Those of the first category appeared to be of medium size and inclined to stoutness; on the upper stretches of the river they are taller. These and other differences may be due in a measure to tribal changes brought about by head−hunting raids. It is known that there was an influx of Ot−Danums from the Samba on account of such raids. While all Katingans eat snakes and large lizards, the upper ones do not eat rusa but the lower ones do. Their total number is estimated to be about 6,000. In 1911−1912 this river was visited by cholera and smallpox, which reduced the population by 600 and caused the abandonment of some kampongs.

Under favourable circumstances one may travel by prahu to Kuala Samba, our first goal, in sixteen days, the return journey occupying half that time. On reaching Kasungan the river was not quite two metres deep, dimming our chances of proceeding further with the steam−launch. The djuragan put up his measuring rod on the beach, for unless the water rose he would have to go one day down stream. The prospect was not pleasing. The under kapala of the district, a native official whose title for the sake of convenience is always abbreviated to the “onder,” at once exerted himself in search of a large boat belonging to a Malay trader, supposed to be somewhere in the neighbourhood, and a young Dutchman who recently had established himself here as a missionary was willing to rent me his motor−boat to tow it.

After several days of preparation, the river showing no sign of rising, we started in an unusually large prahu which was provided with a kind of deck made of palm−leaf mats and bamboo, slightly sloping to each side. It would have been quite comfortable but for the petroleum smoke from the motor−boat, which was sickening and made everything dirty.

In 1880, when Controleur W.J. Michielsen visited the Katingan and Samba Rivers, the kampongs consisted of “six to ten houses each, which are lying in a row along the river bank and shaded by many fruit trees, especially cocoanut palms and durians.” A similar description would serve to−day. The large communal house as known in most parts of Borneo does not seem to obtain here. Communal houses of small size were in use ten years

previously and are still found on the Upper Samba. Their gradual disappearance may be explained by the fact that the government, as I was informed, does not encourage the building of communal houses.

Whatever the reason, at the present time the dwelling is a more or less flimsy structure, built with no thought of giving access to fresh air, and sometimes no provision is made for the escape of smoke from the fireplace. But the people are very hospitable; they gladly received us in their houses, and allowed me, for purposes of ventilation, to demolish temporarily part of the unsubstantial wall, which consisted of bark or stiff mats. The high ladder is generally provided with a railing leaning outward at either side.

The Katingans are shy, kind−hearted natives, the great majority of them being unusually free from skin disease. No illness was apparent. With some of the Lower Katingans the calf of the leg was below normal size. This was the case with three women in Pendahara, and also with a blian who otherwise was a stout man. All the men have a large representation of the full moon tatued on the calf of the leg, following the custom of the Ot−Danums, Murungs, and Siangs. As far as I ascended the river the Upper Katingans rarely have more tatuing than this, but the Lower Katingans are elaborately ornamented, chest and arms being covered with illustrations of familiar objects. Several old men, now dead, had their bodies, even their backs, legs, and faces, covered with tatu marks, and one thus decorated was said still to be living.

Near the kampong Pendahara, where we camped the first night, were many of the majestic tapang trees which I first noticed on the Barito. In the calm evening after a light shower, with the moon almost full, their tall stems and beautiful crowns were reflected in the placid water. The Katingans guard and protect these trees because they are the abode of bees, and when the Malays cut them down the Dayaks are indignant. Both honey and wax are gathered, the latter to be sold. The nest is reached in the customary manner by a ladder of sharpened bamboo pegs driven into the rather soft wood as the man ascends. The gathering is done at night, an assistant bearing a torch made of bark and filled with damar or wax. The native first smears himself with honey in order that the bees shall not sting him; when he reaches the deposit a large bark bucket is hoisted up and filled. In lowering it the honey sometimes disappears, my informant said, because antoh is very fond of it.

About noon, as we were passing a ladang near Bali, we heard the beating of a gong, also weird singing by a woman. It was evident that a ceremony of some kind was in progress, probably connected with funeral observances, so I ordered a halt. As we lay by many people gathered on the top of the steep bank. We learned that an old woman had died and that the ceremonies were being performed in her honour. I climbed the ladder and found in front of me a house on poles, simply constructed, as they always are at the ladangs. Several of the men wore chavats; an elderly female blian sang continuously, and a fire was burning outside.

Ascending the ladder of the house I entered a dingy room into which the light came sparingly. In a corner many women were sitting silently. Near them stood one of the beautiful red baskets for which the Katingans higher up the river are famous. As I proceeded a little further an extremely fine carved casket met my astonished eyes. Judging from its narrowness the deceased, who had been ill for a long time, must have been very thin when she passed away, but the coffin, to which the cover had been fastened with damar, was of excellent proportions and symmetrical in shape. The material was a lovely white wood of Borneo, on which were drawn large round flowers on graceful vines, done in a subdued light red colour procured from a pigment found in the earth. The effect was magnificent, reminding me of French tapestries. Two diminutive and unfinished mats were lying on the cover, symbolising clothing for the deceased, and tufts of long, beautiful grass had been tied to the top at either end. The coffin was to be placed on a platform in the utan. Its name in Katungan is bakan runi; (bakan = form, exterior; runi = dead person)

To see such an artistic production was worth a great deal of trouble. Usually this and similar work is made by several working in unison, who co−operate to obtain the best result in the shortest time. I was gratified when they agreed to make an exact copy for me, to be ready on my return from up country. When one of the men consented to pose before the camera his wife fled with ludicrous precipitation. A dwarf was photographed, forty years old and unmarried, whose height was 1.13 metres.

I was about to leave when the people began to behave in a boisterous manner. Men caught firebrands and beat with them about the feet of the others. Some cut mats in pieces, ignited them, and struck with those. A woman came running out of the house with a piece of burning mat and beat me about my feet and ankles (my trousers and shoes were supposed to be white) and then went after others, all in good humour and laughingly. She next exchanged firebrands with a man, and both struck at each other repeatedly. This same custom is used at funerals

with the Ot−Danums on the Samba, and the explanation given in both tribes is that the mourners want to forget their grief.

After distributing pieces of chewing−tobacco to all present, which seemed to please them much, I left the entertaining scene. In the afternoon we arrived at a small kampong, Tevang Karangan, (tevang = inlet; karangan = a bank of coarse sand or pebbles) where Upper Katingans appeared for the first time. No Malays live here, but there is much intermixture with Ot−Danums. The people were without rice, and edible roots from the jungle were lying in the sun to dry. The cemetery was close at hand in the outskirts of the jungle, where little houses could be seen consisting simply of platforms on four poles with roofs of palm−leaf mats, each containing one, two, or three coffins. It is impossible to buy skulls from the Dayaks on account of their fear that the insult may be avenged by the ghost of the original owner, through the infliction of misfortunes of various kinds—illness, loss of crops, etc. According to their belief, punishment would not descend upon the stranger who abstracted a human bone from a coffin, but upon the natives who permitted the theft. Moreover, they believe they have a right to kill the intruder; the bone must be returned and a pig killed as a sacrifice to the wandering liao of the corpse. But the case is somewhat different with slaves, who up to some thirty years ago were commonly kept in these districts, and whose bodies after death were disposed of separately from those of free people.

Kuala Samba is quite a large kampong situated at the junction of the Samba with the Katingan River, and inhabited chiefly by the Bakompai, a branch of the Malays. Our large boat had to remain here until we returned from our expedition up the Samba, the main tributary of the river and inhabited by Ot−Danums who are called Duhoi, their proper name in these parts. I desired to start immediately and the “onder” of the place, as well as the pumbakal, at once set to work chasing for prahus, but things moved slowly and people seemed to take their own time about obeying the authorities.

Not until nine o'clock next day could we leave, and I was glad it was no later. The prahus in these regions are large and comfortable, with a bamboo covering in the bottom. They probably originated with the Bakompai, but the Duhoi also make them. At five o'clock it was thought best to camp at the lonely house of a Kahayan, recently immigrated here, whose wife was a Duhoi woman. As usual I had to remove part of the wall to get air, the family sleeping in the next room. In the small hours of the morning, by moonlight, two curious heads appeared in the doorway, like silhouettes, to observe me, and as the surveillance became annoyingly persistent I shortened the exercises I usually take.

At the first kampong prahus and paddlers were changed, and on a rainy day we arrived at a small kampong, Kuluk Habuus, where I acquired some unusually interesting carved wooden objects called kapatongs, connected with the religious life of the Duhoi and concerning which more will be told presently. As a curious fact may be mentioned that a Kahayan living here had a full, very strong growth of beard. A few more of the Kahayans, one in Kuala Kapuas for instance, are known to be similarly endowed by nature although not in the same degree as this one. The families hospitably vacated their rooms in our favour, and a clean new rattan mat was spread on the floor. At Tumbang Mantike, on this river, there is said to be much iron ore of good quality, from which formerly even distant tribes derived their supplies.

I had been told that a trip of a few hours would bring us to the next kampong, but the day proved to be a very long one. There were about five kihams to pass, all of considerable length though not high. It soon became evident that our men, good paddlers as they were, did not know how to overcome these, hesitating and making up for their inefficiency by shouting at the top of their voices. However insignificant the stream, they yelled as if passing a risky place. Sunset came and still the kampong was—djau (far). Mr. Loing had gone in our small prahu with four of our best men to finish the map−making, if possible, before darkness set in.

The light of day faded, though not so quickly as the books represent, but soon it was as dark as possible before the appearance of the waning moon which would not be visible for several hours. I had let Mr. Loing have my lamp, so I lit a candle. It was not a pleasant experience, with clumsy stupid men who, however, did their best, all finally taking to the water, wading and pushing the boat, constantly emitting loud, hoarse cries to encourage themselves; and thus we progressed little by little. What with the faint light of the candle, the constant rush of water, and the noise of the rapids, though not dangerous in the day time, the situation demanded calmness. Moreover, there was the possibility of an overflow of the river, which often happens, caused by rains above. I thought of the Kenyahs of the Bulungan—if I only had them now. After an hour and a half of this exasperating sort of progress we came to smooth water, but even here the men lost time by running into snags which they

ought to have seen, because I had gotten my hurricane lamp from Mr. Loing whom we had overtaken. One of the men was holding it high up in the bow, like the Statue of Liberty in New York harbour.

There were only three or four houses at the kampong where we arrived at nine o'clock, but people kindly permitted us to occupy the largest. The men were allowed an extra ration of rice on account of their exertions since eight o'clock in the morning, as well as some maize that I had bought, and all came into the room to cook at the fireplace. Besides Mr. Loing and myself all our baggage was there, and the house, built on high poles, was very shaky. The bamboo floor gave way in a disagreeable manner, and it did not seem a remote possibility for it to fall, though the genial lady of the manor, who went away herself, assured us that the house was strong. I did not feel thoroughly comfortable until the “onder” and the thirteen men had finished their cooking and gone elsewhere to camp. When all was quiet and we could go to sleep it was twelve o'clock.

Early in the morning Mr. Loing went back in the small prahu to take up the map where he had been compelled to quit on account of the darkness. In the meantime I had opportunity to receive a man who had been reported to me the previous night as wanting assistance because of a wound on his head. Knowing that the Dayaks are always ready to seize an opportunity to obtain medicine, even when they are well, I postponed examining into his case. He had merely a scratch on his forehead—not even a swelling.

CHAPTER XXXI

AMONG THE DUHOI (OT−DANUMS)—RICH COLLECTIONS—THE KAPATONGS—THE BATHING OF DAYAK INFANTS—CHRISTMAS EVE—THE FLYING BOAT—MARRIAGE CEREMONIES

As we approached the kampong Kuala Braui, our next objective, the men in our prahus began yelling in time, in a manner surprisingly like a college yell. We were received at the landing float by the "onder" of the place, a nervous and shy but intelligent looking Duhoi. Pajamas graced his tall form as an outward sign that he was more than an ordinary Dayak, and he wore the same suit every day for a week without washing it. He spoke very few Malay words, which made intercourse with him difficult. Very gentle and retiring, by those unacquainted with the Dayaks he would be regarded as unlikely to possess head−hunting proclivities; nevertheless, twenty years previous to my visit, this same man avenged members of his family who had been deprived of their heads by Penyahbongs, killing two of the band and preserving their heads. Ten years before he had presented them to Controleur Baren on the Kayan River, thus depriving me of the chance I had hoped for on my arrival.

The small kampong on the river bank, which here is over twenty metres high and very steep, is new, and a primitive pasang grahan was in course of erection. Six men were much entertained by the novel work of putting up my tent and received tobacco as remuneration. The place lies near an affluent from the north, called Braui, which is more difficult of ascent than the Samba on account of its many kiams. The kapala of the kampong, with two prahus, had ascended it in twenty days. The Dayaks told me that if they wanted gold they were able to wash much in these rivers when the water is low.

I heard here of large congregations of wild pigs, up to 500 or 1,000. When the herds, called dundun, have eaten all the fruit at one place they move to another, feeding and marching, following one leader. They can be heard at a great distance, and there is time to seek safety by climbing a tree or running. When hunting pigs in the customary way, with dogs and spears, men have been killed by these animals, though the victims are never eaten. A fine rusa with large horns was killed one day when crossing the river, and I preserved the head. It seemed to me to have shorter hair on the back and sides than this deer usually has, and was larger. The flesh tasted extremely well, in fact much better than that of the ordinary variety. During our stay here, in December, a strong wind blew almost every day, late in the afternoon, not always bringing rain, and quite chilly after sunset.

When Schwaner made his memorable exploration in 1847 he did not come up the Samba, but ascended the Katingan River, returning to Western Borneo over the mountains that bear his name. Controleur Michielsen, in 1880, was the first European to visit the Samba River, and since then it has been ignored by explorers. It is part of a large region occupied by the Ot−Danums, a name which signifies people living at the sources (ot) of the rivers (danum = water, river). They are found chiefly around the headwaters of the Kapuas and the Kahayan, and on the Samba and Braui. Some also live on the upper tributaries to the Katingan, for instance on the Hiran. On all these rivers they may number as many as 5,000, about 1,200 of which should be located on the Samba and the Braui. The last figures are fairly correct, but the first ones are based only on information derived from native sources.

On the Samba, where I met the Ot−Danums, they are known as Duhoi, a name applied by themselves and other tribes. They are still in a primitive condition, though in outward appearance beginning to show the effect of foreign influence. While a few wear chavats and sometimes becoming rattan caps, nearly all cut their hair, and they no longer have sumpitans. Higher up the river is a Malay kampong consisting of settlers from the Western Division. Occasional traders also bring about inevitable changes, though as yet few of these Dayaks speak Malay.

The Kahayans who live to the east of them always liked to come to the Samba, often marrying Duhoi wives, and they also exert an influence. In intellect they are superior to the Duhoi as well as in knowledge of worldly affairs, in that respect resembling the Malays, though they have none of their objectionable qualities. One or two of them are generally present in a kampong, and I always found them useful because they speak Malay well besides being truthful and reliable. Some of these are converts to Christianity through the efforts of the Protestant mission on the Kahayan River, which has begun to extend its activity to the Samba by means of such Kahayans.

I prevailed on the "onder" to call the people from three kampongs above, promising presents of rice. He wrote the order himself in Arabic letters and sent it on, and late the following day twenty−five Duhoi arrived, among them four women and several children. Many showed indications of having had smallpox, not in a scarred face,

but by the loss of an eye; one man was totally blind from the same cause. In order to induce them to dance I bought a domestic pig, which was brought from the ladang and in the customary way was left on the ground in the middle of the dancing place. Four men attended to the gongs which had unusually fine tones.

The women were persuaded to come forward with difficulty. As I expected, they were like bundles of cloth, exhibiting Malay innovations, and the dance was uninteresting, each woman keeping her position in a stationary circle. There was not much life in the dancing of the men either, each performing at his place in a similar circle, with some movements resembling the most common form of dancing hitherto described. Finally, one whose long hair and attire, an ancient short shirt, betrayed him as belonging to the old school, suddenly stepped forward, drew his parang, and began to perform a war dance, swinging himself gracefully in a circle. Another man was almost his equal, and these two danced well around the babi which was lying at the foot of two thin upright bamboo poles; to the top of one of these a striped cloth had been tied.

This meeting was followed by friendly dealings with the Dayaks of the kampongs above, who began to visit me. Silent and unobtrusive, they often seated themselves before my tent, closely observing my movements, especially at meal time, eager to get the tin that soon would be empty. A disagreeable feature, however, was that the natives often brought mosquitoes with them, and when they began to slap themselves on arms and legs their absence would have been more acceptable than their company. But each day they offered for sale objects of great interest and variety. Several beautifully engraved wah−wah (long armed monkey) bones, serving as handles for women's knives, are worthy of mention, one of which might be termed exquisite in delicate execution of design. Admirable mats were made by the tribe, but the designs proved perplexing to interpret, as knowledge on the subject seems to be lost. The difficulty about an interpreter was solved when the “onder's” clerk returned from a brief absence; he was an intelligent and trustworthy Kayan who spoke Malay well, had been a Christian for six years, but adopted Islam when he married a Bakompai wife. Compared with the retiring “onder,” who, though a very good man, seemed to feel the limitations of his position, this Kahayan appeared more like a man of the world.

I made a large collection of kapatongs (in Kahayan, hapatong), which here, and in less degree on the Katingan, I found more abundant than in any region of Borneo visited. These interesting objects are carved representations of a good antoh, or of man, bird, or animal which good antohs have entered, and which, therefore, are believed to protect their owners. When the carving has been finished the blian invokes a beneficent antoh to take it in possession, by dancing and singing one or two nights and by smearing blood on it from the sacrifice of a fowl, pig, or a water−buffalo—formerly often taken from a slave. As with a person, so with a kapatong; nobody is permitted to step over it lest the good antoh which resides in it should become frightened and flee.

Kapatongs are made from ironwood; they are of various kinds and serve many purposes. The larger ones, which appear as crude statues in many kampongs of Southern Borneo, more rarely on the Mahakam, are supposed to be attendants on the souls of the dead and were briefly described in Chapter XII.

The smaller kapatongs are used for the protection of the living and all their earthly belongings or pursuits. These images and their pedestals are usually carved from one block, though the very small ones may be made to stand inside of an upright piece of bamboo. Some kapatongs are placed in the ladang to protect the crops, others in the storehouse or inside the baskets where rice or food is kept. The monkey, itself very predatory on the rice fields, is converted into an efficient watchman in the form of its image, which is considered an excellent guardian of boiled rice that may be kept over from one meal to the next.

For protection at night the family may have a number of images, preferably seven, placed upright and tied together, standing near the head of the bed; a representation of the tiger−cat is placed on top of it all, for he impersonates a strong, good antoh who guards man night and day. From the viewpoint of the Katingans the tiger−cat is even more powerful than the nagah. When cholera or smallpox is apprehended, some kapatongs of fair size are left standing outside the room or at the landing places of the prahus. Images representing omen birds guard the house, but may also be carried on a journey in a basket which is placed near the head when a man is sleeping in a prahu or on land. A kapatong of one particular omen bird is thus capable of allaying any fear if real omen birds or snakes should pass in front of the boat.

On head−hunting expeditions kapatongs were of prime importance. Smeared with blood, they were taken along for protection and guidance, and afterward were returned to the room. Some of them are very curious; a favourite one represents a pregnant woman, the idea being that a woman with a child is a good watcher, as the

infant cries and keeps her awake. That the child is not yet born is of no consequence. In my possession is a kapatong of the head−hunters which represents a woman in the act of bearing a child. Among the Dayaks the woman is regarded as the more alert and watchful; at night it is she who perceives danger and thrusts her hand against her husband's side to arouse him.

When feasts occur kapatongs, etc., are taken outside the house to partake of blood from the animal or (formerly) the slave sacrificed. They are supposed to drink it and are smeared with it. When important they are never sold, but are transmitted as heirlooms from father to son. They passed in a circuit among brothers, remaining three to five years with each, and were the cause of much strife, brother having been known to kill brother if deprived of his kapatong.

Many of those which came into my possession showed distinct traces of the application of blood. Some had necklaces around the necks as a sign that they had received human blood. A few of these were later estimated by an intelligent Dayak to be two hundred years old. At the time of purchase I was struck with the fact that the Ot−Danums were parting with objects of great importance in their religious life. One reason is that the young generation no longer practises head−hunting, which necessitated the use of a great number of kapatongs. The people are gradually losing faith in them.

These Duhoi were curiously varying in their physical aspects; some were tall, like the “onder,” others of medium size; some had hooked noses, others turned up noses. The wife of the “onder” had unusually light skin, but there was no indication of a mixture of white blood. Their temperament is peaceful and gentle, and, according to the Kahayan clerk, who had been here ten years, they are truthful. Most of those that were measured came from the kampongs above, one of which is only two or three hours away. Several men had their foreheads shaved in a manner similar to the Chinese, a straight line from ear to ear forming the hair limit. I observed the same fashion with the Upper Katingans, and in rare cases also with the Kayans and Kenyahs. They make fire by drilling one upright stick into another lying on the ground. Seven is their sacred number. Formerly the kampongs elected a kapala for an indefinite period. If he was satisfactory he might remain a long time. At present the native kapala of the district makes the appointment.

Among my friends here were the kapala of the kampong and his wife. She was an interesting woman, very intelligent, with a slender but splendid figure, and her face was curiously Mongolian. She had lost an eye by smallpox, but there was so much light and vivacity in the brown one she had left that the missing organ was forgotten. At first sternly refusing to face the camera, after receiving chocolate like the rest both she and her husband wanted to be photographed.

More than once I have seen the Dayak father here and elsewhere take the youngest baby to the river to bathe. As soon as the navel is healed, about eight days after birth, the infant is immersed, usually twice a day, before seven o'clock in the morning and at sunset. The temperature of the river water here in the morning was 72 F. It is astonishing how the helpless little nude being, who can neither walk nor talk, remains absolutely quiet while being dipped under the cold water again and again. The father holds it in a horizontal position for immersion, which lasts only a few moments, but which undoubtedly would evoke lusty cries from a white child. Between the plunges, which are repeated at least three times, with his hand he strokes water from the little body which after a few seconds is dipped again. It seems almost cruel, but not a dissenting voice is heard. The bath over he takes the child into his arms, ascends the ladder of the river bank and carries it home as silent as when it went forth. Sometimes one may hear children cry from being cross, but as a rule they are charming.

Monkeys, including the orang−utan, are eaten, but not the crocodile nor the tiger−cat. In accordance with the prevailing Dayak custom men and women eat at the same time. If they choose, women may accompany fishing or hunting expeditions if not far away, but when the game is wild ox or rhinoceros they are not allowed to take part. When there is an overflow of the river one cannot go hunting, nor if one should fall at the start, nor if the rattan bag should drop when the man slings it on his back, or if anybody sneezes when about to leave the house. If when going out on an errand one stubs his toe against the threshold, he must wait an hour. Having started on a fishing or hunting expedition nobody is permitted to go back home; should this be done the enterprise would be a failure for the others; nor should the dogs, on a pig hunt, be called in while on a ladang lest monkeys and deer eat the paddi. When about to undertake a journey of more than four or five days' duration one must abstain from eating snake or turtle, and if a pregnant woman eats these reptiles the child will look like them. Should she eat fruit that has fallen to the ground, the child will be still−born. The same prohibition applies to lizards.

Up to twenty years ago the Duhoi and the Katingans made head−hunting raids on each other. It was the custom to take a little flesh from the arm or leg of the victim, which was roasted and eaten. Before starting on such an expedition the man must sleep separate from his wife seven days; when going pig−hunting the separation is limited to one day. On the Upper Samba the custom still prevails of drinking tuak from human skulls. This was related to me by the “onder” of Kasungan, a trustworthy man who had himself seen it done.

A wide−awake kapala from one of the kampongs above was of excellent service in explaining the purposes of the ethnological objects I purchased. About articles used by women he was less certain, but he gave me much valuable information, though it was impossible to keep him as long as I desired because he felt anxious about the havoc rusa and monkeys might make with his paddi fields. At five o'clock of an afternoon I had finished, and in spite of a heavy shower the kapala left to look after his paddi, with a night journey of six hours before him. These people are satisfied with little, and he was happy to receive, besides rice and money, a quantity of cocoanut oil and some empty tin cans thrown in.

During this busy day the thought occurred to me that the night was Christmas eve, the great festival in Scandinavian countries, and I had made no preparation for a better meal, having neither time nor means. In fact, it so happened that I had rather less than usual. Nevertheless, the day had passed happily, as I accomplished much and acquired interesting information, for instance, about the flying prahu which I had secured. It was about half a metre long, and this and similar models seem to be quite an institution in the southern parts of Borneo. The Duhoi and the Katingans use the contrivance for curing disease, though not in the way we should expect, by carrying away the disorder, but by making a present of the prahu to a good antoh to facilitate his journey.

The name of the flying prahu is menama, in. Katingan, melambong. The more or less wavy carvings of the edge represent the beach. On board are several wooden images: The great hornbill which carries the prahu along and steers it; the tiger−cat, which guards it; the gong and two blanga (valuable urns), to which are added a modernism in the shape of a rifle—all are there ready to drive away the bad antoh which caused the illness. To a pole—or rather a combination of two poles—are tied two rudely made wooden figures, one above the other, representing, the one below, the djuragan or skipper (tihang); the one above, the master of the “sails” (unda).

When a Duhoi is very ill and able to pay the blian five florins, he promises a good antoh to give him a menama if he will make him well. The contrivance is then made and the necessary ceremonies performed to the end that its purpose shall be fulfilled. In the presence of many persons, the afflicted man lying on his mat, the blian dances in the room holding the prahu on his hands, the left at the bow, and swerving it to left and to right; he sings at the same time but there is no other music. On three consecutive nights this performance is continued for about an hour, near the door, with an eye to the ship's departure, and although it does not disappear it is believed to have accomplished its mission.

The Duhoi are polygamous, as are the Kahayans. According to a rough estimate, one−third of the people have one wife, one−third two, and one−third three. If a girl declines the suitor on whose behalf the father acts, she is not forced and the matter is closed. Should she agree, then the price must first be determined, and is paid in goods, gongs, cattle, domestic pigs, water−buffaloes, etc. Really poor people are not found here, and the least amount a man pays for his wife is two gongs, which are procured from the Malay trader.

About sunset people gather for the marriage ceremony. The couple sit on one gong. A water−buffalo, pig, or fowl having been sacrificed, the blian sings and smears blood on navel, chest, and forehead of the pair. On rising to go to their room the bridegroom beats seven times upon the gong on which they were sitting, and before he enters the door he strikes the upper lintel three times, shouting loudly with each blow. Food is brought there, and while the door is left open the newly wedded eat meat and a stew of nangka seasoned with red pepper and salt, the guests eating at the same time. After the meal the bridegroom gives everybody tuak, and people go home the same evening unless they become drunk, which often happens. The young married couple remain one year with the bride's parents.

CHAPTER XXXII

AGRICULTURAL PURSUITS—FACTS ABOUT ULU−OTS, THE WILD MEN OF BORNEO—TAKING LEAVE OF THE INTERESTING DUHOI—A VISIT TO THE UPPER KATINGANS—DANCING—FRIENDLY NATIVES—DOWN THE KATINGAN RIVER

When about to make a new ladang one fowl is sacrificed in the morning and the blood, with the usual addition of rice, is thrown up in the air by the husband or wife as a present to antoh, the meat being reserved for home consumption. On arrival at the selected place they carry the sharpening stone some distance into the utan where a portion of the same mixture is applied to it. A few weeks are devoted to cutting down the jungle, and then about a month must pass before the felled trees, bushes, and vines are dry enough to burn.

On the day chosen for burning the wood a winnowing tray, on which the outline of a human form has been crudely drawn with charcoal, is hung in the house. The picture represents a good antoh named Putjong and he is solicited to make the wind blow. When starting the fire every one yells “hoi,” thereby calling the winds. One day, or even a shorter time, may suffice to burn the accumulations on the cleared space, and when the work is finished all the participants must bathe.

A simple house is then erected for occupancy while doing the necessary work incident to the raising of crops. The work of clearing the ground is immediately begun and completed in three or four weeks. Then comes planting of the paddi preceded by a sacrifice of pig or fowl. The blood, with the usual addition, is presented to antoh and also smeared on the seed, which may amount to ten baskets full. All the blood having been disposed of in this manner, the meat is put over the fire to cook, and at the noon−day meal is eaten with boiled rice.

In their agricultural pursuits people help each other, taking different fields in turn, and at planting time thirty men may be engaged making holes in the ground with long sticks, some of which may have rattles on one end, a relic of former times, but every one uses the kind he prefers. After them follow an equal number of women, each carrying a small basket of paddi which she drops with her fingers into the holes, where it remains uncovered. They do not plant when rain is falling. After planting is finished, usually in one day, they repair to the kampong, have their evening meal, and drink tuak until midnight.

In five months the paddi is ready for cutting—a very busy time for the people. There are perhaps fifty ladangs and all must be harvested. Husband, wife, and children all work, and the family may have to labour by themselves many weeks before helpers come. In the afternoon of the day previous to commencing harvest work the following ceremony is performed, to provide for which the owner and his wife have brought new rice from the ladang as well as the kapatongs, which in the number of two to five have been guarding the crop.

Inside the room a couple of winnowing trays are laid on the floor and on these are placed the kapatongs in recumbent position, axes, parangs, the small knives used for cutting paddi and other knives, spears for killing pigs as well as those for fish, fish−hooks and lines, the sharpening stone and the hammer used in making parangs and other iron utensils. The guardians of the ladang and the implements are to be regaled with new paddi.

Blood of pig and fowls mixed with new rice having been duly offered to antoh, the mixture is smeared on the kapatongs and implements and a small quantity is also placed on a plate near the trays. Here also stands a dish of boiled rice and meat, the same kind of food which is eaten later by the family. The owner with wife and children having concluded their meal, all others present and as many as care to come are welcome to partake of new rice and meat and to drink tuak.

On the following day they go to the ladang to cut paddi, but barely half the number that took part in the feast assist in the work. The first rice spear that is cut is preserved to be taken home and tied underneath the roof outside the door. This is done in order to prevent birds, monkeys, rusa, or babi from eating the paddi. At the ladang rice is boiled, and on this occasion the family and their guests eat at the same time. When the first baskets of new paddi arrive at the storehouse and the grain is poured out on the floor, a little blood from a fowl sacrificed is smeared on it after the necessary offering to antoh has been thrown up into the air.

Upon the death of a man who was well−to−do, the body is kept for a period of seven days in the coffin, within the family dwelling−house, but for a poor man one day and night is long enough. Many people gather for the funeral. There is little activity in the day time, but at night the work, as the natives call it, is performed, some

weeping, others dancing. When the room is large the feast is held in the house, otherwise, outside. Fire is kept burning constantly during the night, but not in the daytime. Many antohs are supposed to arrive to feast on the dead man. People are afraid of these supernatural associations but not of the departed soul. Formerly, when erecting a funeral house for an important man, an attendant in the next life was provided for him by placing a slave, alive, in the hole dug for one of the upright posts, the end of the post being set directly over him.

On the Samba I found myself in close proximity to regions widely spoken of elsewhere in Borneo as being inhabited by particularly wild people, called Ulu−Ots: (ulu = men; ot = at the headwaters). Their habitats are the mountainous regions in which originate the greatest rivers of Borneo, the Barito, the Kapuas (western), and the Mahakam, and the mountains farther west, from whence flow the Katingan, the Sampit, and the Pembuang, are also persistently assigned to these ferocious natives. They are usually believed to have short tails and to sleep in trees. Old Malays may still be found who tell of fights they had forty or more years ago with these wild men. The Kahayans say that the Ulu−Ots are cannibals, and have been known to force old men and women to climb trees and hang by their hands to the branches until sufficiently exhausted to be shaken down and killed. The flesh is roasted before being eaten. They know nothing of agriculture and to them salt and lombok are non−existent. Few of them survive. On the authority of missionaries there are some three hundred such savages at the headwaters of the Kahayan, who are described as very Mongolian in appearance, with oblique eyes and prominent cheekbones, and who sleep in trees.

They are considered inveterate head−hunters, and the skulls of people killed by them are used as drinking−vessels. Controleur Michielsen, who in his report devotes two pages of hearsay to them, concludes thus: “In the Upper Katingan for a long time to come it will be necessary to exercise a certain vigilance at night against attacks of the Ulu−Ot head−hunters.” A civilised Kahayan who, twelve years previous to my visit, came upon one unawares at the headwaters of the Samba, told me that the man carried in his right hand a sampit, in his left a shield, and his parang was very large. He wore a chavat made of fibre, and in his ear−lobes were inserted large wooden disks; his skin was rather light and showed no tatuing; the feet were unusually broad, the big toe turned inward, and he ran on his toes, the heels not touching the ground.

Without precluding the possibility, although remote, of some small, still unknown tribe, it seems safe to assume that Ulu−Ot is simply a collective name for several mountain tribes of Central Borneo with whom we already have made acquaintance—the Penyahbongs, Saputans, Bukits, and Punans. Of these the last two are nomads, the first named have recently been induced to become agriculturists, and the Saputans some fifty years ago were still in an unsettled state. The “onder” at Braui confirmed this opinion when telling me of the fight he and thirty other Duhoi once had with Penyahbongs from whom he captured two heads—for they are Ulu−Ots, he said.

Before all my things were cleared away from my camping−place and taken to the prahus, the kapala and three women, one of them his wife, came and seated themselves in a row close together in a squatting position. With the few words of Malay he knew he explained that the women wanted to say good−bye. No doubt it was their way, otherwise they have no greetings. At the landing float the “onder” and his Kahayan assistant were present to see us off. When leaving I was on the point of wishing I might return some day to the unsophisticated Duhoi.

On our arrival at Kuala Samba we found ourselves in a different atmosphere. The Bakompai, although affable, are inquisitive and aggressive, and do not inspire one with confidence. The cheerful old Kahayan who lived on board our big prahu to guard it had just one measure of rice left, and was promptly given more rations. On account of the low water and the difficulties attending my use of the *Selatan* it had long been evident that I should have to give up my tour to the head of the Katingan River, but before returning I desired to make the ascent as far as to the first renowned kiham in order to see more of the Upper Katingans.

My prahu leaked so badly that we had to bail it out constantly, and the men were the worst in my experience, lazy and very inefficient, only one of them being strong and agile. Not until eight o'clock in the evening did we reach our destination, the kampong Buntut Mangkikit. In beautiful moonlight I put up my tent on the clearing along the river bank in front of the houses, perhaps for the last time in a long period. The roar of the rapids nearly two kilometres distant was plainly audible and soothing to the nerves, reminding me of the subdued sound of remote waterfalls, familiar to those who have travelled in Norway. However, the kiham at this time was not formidable and comparatively few have perished there, but many in the one below, which, though lower in its fall and very long, is full of rocks. The nights here were surprisingly cool, almost cold, and the mornings very chilly.

A Kahayan was the only person about the place who could speak Malay. The kapala presented the unusual spectacle of a man leaning on a long stick when walking, disabled from wasting muscles of the legs. I have seen a Lower Katingan who for two years had suffered in this way, his legs having little flesh left, though he was able to move. The kapala was a truthful and intelligent man who commanded respect. His wife was the greatest of the four blians here, all women; male blians, as usual, being less in demand. Her eyes were sunk in their sockets and she looked as if she had spent too many nights awake singing, also as if she had been drinking too much tuak. She had a staring though not unpleasant expression, was devoted to her religious exercises, and possessed an interesting personality.

A majority of the women was disinclined to face the camera, one of them explaining that she was not ashamed but was afraid. However, an example in acquiescence was set by the blian and her family. She wore for the occasion an ancient Katingan bodice fitting snugly around the body, with tight sleeves, the material showing foreign influence but not the style of making. Another woman was dressed in the same way, and a big gold plate hung over the upper part of the chest, as is the prevailing mode among women and children. Gold is said to be found in the ground and the Katingans themselves make it into ornaments. Many of the men wore chavats.

Of the men that were measured, one was sombre brown, darker than the rest, and three harelips were observed. A man may have from one to three wives, who sometimes fight, but all ends well. In each family there are at least two children, and often as many as seven, while one woman had borne eleven, of whom only four survived. The feminine fashion in hair−dressing is the same as that followed by the Duhoi, which looks well, the hair folded over on each side with some locks tied over the middle. I saw here two implements called duhong, knives shaped like broad spear points, relics of ancient times, with which the owners would not part. The Katingans are probably the friendliest and best tempered Dayaks I met. The children are tender hearted: when the kapala's nude little son, about two and a half years old, approached my film box his father spoke harshly to him; the child immediately began to cry bitterly and his mother, the great blian, soothed and affectionately kissed him until he became calm.

The obliging kapala, in order to do his bit to induce the people to dance, offered to present one pig if I would give rice and salt. The dancing, which was performed around a blanga on a mat spread on the ground, was similar in character to what may be seen elsewhere in Borneo. Four men and four women performed one dance. In another only women took part, and they moved one behind another in a circle with unusually quick, short steps, signifying that good antohs had taken possession of them. The principal blian later sat down on a mat and sang; three women sitting near accompanied her by beating small oblong drums. They all became enthusiastic, for music attracts good antohs. In the Katingan language the word lauk means creature; an additional word, earth, water, or air, as the case may be, signifying whether an animal, a bird, or a fish is meant.

Having accomplished in a short time as much as could be expected, we returned to Kuala Samba, and from there, in the first week of January, started southward in our big prahu. The river was very low, and after half an hour we were compelled to take on board two Bakompai men as pilots among the sand banks. At Ball the coffin was found to be ready and was taken on board. It had been well−made, but the colours were mostly, if not all, obtained from the trader and came off easily, which was somewhat disappointing. It seemed smaller than the original, though the makers insisted that it was quite similar and challenged me to go and see the one they had copied, which was in the vicinity, behind the kampong.

Here I saw a new and somewhat striking arrangement for the disposition of the dead. A small white house contained several coffins guarded by seven kapatongs of medium size, which stood in a row outside, with the lower part of their legs and bodies wrapped in mats. The skull of a water−buffalo and many pigs' jaws hung near by. Two tall memorial staffs, called pantars, had been erected, but instead of the wooden image of the great hornbill which usually adorns the top, the Dutch flag presented itself to view. Appearing beautiful to the Dayaks it had been substituted for the bird. The all−important second funeral having been celebrated, the dead occupied their final resting place.

We spent the night at a large kampong where there was a fine, straightforward kapala who appeared at a disadvantage only when, with intent to please me, he wore clothes, but from whom I gained valuable information. He also had a sense of humour, and next day when our coffin was carried ashore, in order that I might be enlightened in regard to the significance of its decorations, he laughed heartily and exclaimed in astonishment at the sight. With the exception of the upper part of the back, few parts of his body were left uncovered with tatu

marks. Over and below each knee he had extra designs to protect him from disease, he said, each of which represented a fish of ancient times.

At our next and last stopping−place the small pasang grahan, on very tall poles, was in poor condition and the roof was full of holes, but the kapala, an uncommonly satisfactory man—there was no Malay about him—saw to it that rough palm−leaf mats were placed above the ceiling to protect against possible rain, and two large rattan mats were spread on the shaky floor, so we had a good camping−place. There was an unusually pretty view of the majestic river from up there, including a wide bend just below. Experience modifies one's requirements, and I felt content as I took my bath at the outer corner of the shed, high above the still water on which the moon shone placidly.

CHAPTER XXXIII

KASUNGAN—THE WEALTH OF THE DAYAKS—ANIMISM—GUARDIANS OF THE DEAD—HUGE SERPENTS—CROCODILES—GOVERNMENT OF DAYS GONE BY—KATINGAN CUSTOMS AND BELIEFS

Next day we arrived at Kasungan, where we were offered quarters in a large room in the “onder's” house. There was no news of our steamer, the *Selatan*, and I remained about a week. The “onder,” a Kahayan who had been here twenty−five years, had the intelligence and reliability that seems characteristic of the Dayaks of the Kahayan and Kapuas Rivers, and, as a matter of course, possessed extensive knowledge of the Katingan. He had lately been converted to Christianity. The kampong was quite large, and although it has been subject to the influence of Malay traders a long time and quite recently to that of a missionary, still the natives offered considerable of interest. It is only eight years since the communal house obtained. Before some of the houses stand grotesque kapatongs, and the majority of the population lives in the atmosphere of the long ago. I was still able to buy ethnological articles and implements which are becoming increasingly difficult to secure.

On entering a house the salutation is, *Akko domo* (I (akko) arrive). To this is answered, *Munduk* (Sit down). On leaving the visitor says, *Akko buhao* (I am going). To which is responded, Come again. On my way to visit a prominent Katingan I passed beneath a few cocoanut trees growing in front of the house, as is the custom, while a gentle breeze played with the stately leaves. “Better get away from there,” my native guide suddenly said; “a cocoanut may fall,” and we had scarcely arrived inside the house before one fell to the ground with a resounding thump half a metre from where I had been standing. Eighteen years previously a Katingan had been killed in this way as he descended the ladder. Eleven years later another was carrying his child on his back when a cocoanut of small size hit and killed the little one.

The man whose house I visited was rich, according to Dayak standard, not in money, but in certain wares that to him are of equal or greater value. Besides thirty gongs, rows of fine old valuable jars stood along the walls of his room. There are several varieties of these blangas, some of which are many hundred years old and come from China or Siam. This man possessed five of the expensive kind, estimated by the “onder" at a value of six thousand florins each. He consented to have one of the ordinary kind, called gutshi, taken outside to be photographed; to remove the real blanga, he said, would necessitate the sacrifice of a fowl. To the casual observer no great difference between them is apparent, their worth being enhanced by age. In 1880 Controleur Michielsen saw thirty blangas in one house on the Upper Katingan, among them several that in his estimation were priceless. Over them hung forty gongs, of which the biggest, unquestionably, had a diameter of one metre. Without exaggeration it represented, he says, a value of f. 15,000, and he was informed that the most valuable blangas were buried in the wilds at places known only to the owner. No European had been there since Schwaner, over thirty years previously, passed the river.

In front of another house was a group of very old−looking stones which are considered to be alive, though such is not the belief with reference to all stones, information in that regard being derived from dreams. Those on view here are regarded as slaves (or soldiers) of a raja, who is represented by a small kapatong which presides in a diminutive, half−tumbled−down house, and who is possessed by a good antoh that may appear in human shape at night. When the people of the kampong need rice or have any other wish, a fowl or pig is killed; the blood is smeared on the raja and on the slaves, and some of the meat is deposited in a jar standing next to him. When advised of what is wanted the raja gives the slaves orders to see that the people are supplied.

At each side of the base of a ladder, a little further on, stood a post with a carving of a tiger−cat grasping a human head and guarding the entrance. They are a protection to the owner of the house against evil antohs; it is as if they were saying: “Keep away, antoh! You see I slew a man, so you know what will happen to you!”

The bones of dead persons were kept at the back of at least one dwelling, inside the appropriate small house provided for the purpose, and some curious kapatongs of large size were to be seen, some of which had guarded the dead for more than a hundred years. One has the head of a good antoh, showing big corner teeth and out−hanging tongue, as he watches that no bad antohs come to injure the dead man's soul.

A woman carrying a betel box is believed to watch well because when chewing betel one does not sleep; but

in her case there must always be a male kapatong near by, for a woman alone is not sufficient protection. Betel makes the mouth and lips beautiful in the estimation of the natives, therefore many kapatongs are seen with betel box in hand.

A very extraordinary guardian of the dead is a loving pair, the man's arm placed affectionately over the shoulder of his companion. Lovers do not sleep, hence they are good at watching, reasons the Dayak.

In these regions I gathered some information about the huge serpent of which one hears occasionally in Borneo, called sahua by the Malays, and which, according to accounts, may attain a length of seven or eight metres. It is able to remain long under water, moves slowly on land, and can climb trees. Deer and pigs are its usual food, but at times it attacks and eats natives. A few years previously this python devoured a Katingan, and as it remains at the same place for some time after a meal, two days later it was found and killed. These Dayaks kill it with knives, spears being ineffectual, and the meat is eaten. A very large lizard is also said to be a man−eater.

Crocodiles are numerous here, and at low water have been responsible for the disappearance of many Katingans. They are considered good antohs, but if one of the monsters devours a man arrangements are made to kill it, though otherwise the natives prefer not to do so and do not eat it. For the purpose of capture they use a piece of strong wood, about three centimetres thick, pointed at each end. A line of fibre a metre long is tied to the middle, and about half a metre above the surface of the water an ill−smelling monkey or dog is suspended from it as bait. When swallowed by the crocodile the stick usually becomes wedged in the mouth between the upper and lower jaws and he is hauled ashore.

A few years before my visit the brother of the kapala was eaten by a crocodile as he and two other Katingans were fishing with a casting−net. While sitting in the prahu he was attacked by the animal and dragged below the surface of the water. The entire kampong was incensed and believed that a bad antoh had ordered the crocodile to commit the evil deed. A babi was immediately killed and the blood sacrificed to induce a good antoh to come and help them; they also danced for the same purpose, while some of them prepared the material with which to catch the reptile. They have been fishing for crocodiles ever since, for their religion prohibits quitting until the bait is taken either by the large fish, tapa, or by the python, called sahua. When either of these huge animals swallows the bait, that event is regarded as a sign from a good antoh to the effect that their task is finished. Many years may elapse before the message comes and the kapala, who had caught fifty, must still continue, for twenty years if necessary, until the sign appears.

When preparing to kill crocodiles the magic use of rice is as essential as when the lives of men are to be taken, proceedings in both cases being identical. If a Katingan wants to get a head he must pay the blian to conjure with rice—a cupful is enough—and to dance. To have this done costs one or two florins. During incantations and dancing the blian throws the rice in the direction of the country where the man wants to operate. By the act of throwing the rice an antoh is called to assist and he causes the intended victim to become stupid and forgetful, therefore easily killed. From two to seven days later a start is made on the expedition, and when the head is cut the rice is sure to be found inside.

In earlier days the kampongs were ruled by hereditary rajas called bakas, who held their people in firm subjection, and they are reported to have fought much among themselves. According to the “onder” of the kampong, it was not an unusual occurrence to murder a rich man and take his goods as well as his head, and as murder could not be compensated with money, his relatives having to avenge the deed, a vendetta ensued which might last five or six years. A custom which required a debtor to become the slave of his creditor, even in the case of brothers, has been abolished.

Formerly when an enemy approached a curious message was sent from kampong to kampong. To the top of a spear was tied a tail feather of the rhinoceros hornbill, symbolising rapid movement, and also a woman's skirt of fibre with a bunch of odoriferous leaves attached. Women used to fasten these to the skirt in addition to those placed in the hair. This meant an urgent order for people to gather quickly for the fight, and in the event of failure to obey the call promptly the leaves and skirt signified unworthiness to wear masculine attire.

Two methods of fire−making were in use here, by drilling or by friction with a rope made of fibre or rattan across a block of wood. The Katingan does not know the art of doing inlaid work on the blade of the parang, in which Kenyahs and Kayans excel, and he makes no earthen ware. Hair that has been cut from the head must be placed in a tree. Their sacred number is seven, as is that of the Ot−Danum, Kapuas, and Kahayan. As usual with

Dayaks, all members of the family eat at the same time as the men. Sons and daughters inherit equally, while brothers and sisters receive nothing unless the deceased was childless.

The father of a young man must arrange the payment for the bride, and probably receives remuneration himself for the service rendered. The son−in−law remains in the house of his father−in−law a year or more and assists him. A raja was privileged to have five or six wives.

During the period of pregnancy both wife and husband are subject to the following restrictions:

1. They must not split firewood, otherwise harelip will result, or a child with double thumbs.

2. The arms or legs must not be cut off from any animal caught, else the child will have stumps of arms or legs.

3. When fish has been caught the couple must not open the head themselves; if they do the child will be born without ears.

4. The husband must not make fish hooks, or the child will be born doubled up in a wrong position, perhaps causing the mother's death.

5. Neither of them may stretch up either arm to take food from the hanging trays of bamboo, called toyang. Should they do so the child will come into the world arm first, or probably not be born.

6. They must not nail up boxes or anything else (nails were formerly of wood), nor tie up anything,—for instance, a rattan for drying clothes,—nor lock a trunk, else the child will not be born and the mother will die.

7. In case of feeling hot, if he or she should take off their upper garments they must not be tied round the neck, or the child will be born dead, with the navel cord around its neck.

8. The work of tying split bamboo sticks into loose mats, for instance such as are used in the bottom of the prahu, must not be done, or the child will be born with two and two or all four fingers grown together.

9. They must not put the cork in a bottle or place the cover on a bamboo basket containing rice in order to close it for a considerable time, as in that case the child will be born blind in one or both eyes, or with one ear, one nostril, or the rectum closed, but the cover may be put back on a basket from which rice is taken for daily use.

10. For five months the work of putting a handle on a parang and fastening it with damar must not be done else both mother and child would die.

The name given the child when the umbilical cord is cut remains unchanged. Among names in vogue here for men are Bugis (black), Spear, Axe, Duhong (ancient knife), etc., Tingang and other names of birds, or names taken from animals, fish, trees, and fruit; many are called Peti, the Malay name for a steel trunk sold by traders. A person must not give his own name nor call by the name of his father, mother, father−in−law, mother−in−law, grandfather or grandmother, whether they are alive or dead. If one of these names is given there will be no luck, for instance, in fishing or hunting.

There are many sorts of pali (sins) but all may be paid for in kind or by sacrifice. One of the most serious is that of a widow who marries before the second funeral of her husband has been solemnised. Although the rule does not apply to husband and wife, a man is forbidden to touch a woman's dress and vice versa, and transgression must be made good by sacrifice of a fowl or even a pig. In case a chavat or other article of clothing belonging to a man has been hung to dry after washing, and a woman other than his wife wishes to take the garment from the rattan line, she must use a stick for the purpose.

Every big tree is believed to have an antoh in possession of it, some being well disposed, others of evil disposition. When a man is killed by falling from a tree, members of his family come and proceed to hit it with darts blown from the sumpitan, cut it with parangs, spear it, and as final punishment it is felled. Many people gather, angry with the tree antoh, and a feast is made for the purpose of calling a good spirit to drive away or kill the bad one.

When a large tree falls no work is done for seven days. House building must cease and sacrificial offerings of pork and tuak are made to a good antoh to induce him to deal with the evil one that caused the mishap.

Travellers who encounter omen birds, or hear the cry of a rusa at noon, or similar omens, camp for three days and then proceed to the nearest kampong to buy fowl, a pig, and eggs, in order to sacrifice not only to the bird or animal that gave the omen, but also to the good antoh which sent it. Seven days afterward the journey is continued.

When a plandok (mouse−deer) appears underneath a house the owner is sure to die unless proper remedies are employed. If people succeed in catching the animal it is not killed, but smeared all over with cocoanut oil. Then

they kill a dog, take its blood, which is mixed with rice and thrown to the plandok; also the blood of a fowl, with the same addition, is offered. The plandok's liao is given this to eat in order that he may not cause the occupant of the house to die; the animal is then carried into the utan, about an hour's walk, and set free. Three days afterward they sacrifice a pig, the blood of which, with the usual admixture, is given to the bad antoh who sent the plandok, with entreaties not to kill the man. For seven days the head of the house stays in the kampong, being free to bathe in the river and walk about, but he must not go outside the settlement.

The red monkey is an attendant of a bad antoh, and if he enters a house or comes on the roof or underneath the house it is considered very unfortunate. There is no remedy and the owner must move elsewhere; the house is demolished, the wooden material carried away and erected in another kampong. Should he remain at the same place there would be much strife between him and his neighbours. If a wah−wah climbs on a roof the house will burn down. There is no remedy for this either; the incumbent leaves and makes a new home.

On the other hand, should a scaly ant−eater enter a room it is a joyful event, indicating that the owner will become rich. The animal is caught, blood from a fowl is smeared over him, and he is carried back to the utan.

If it should so happen that a red−backed lizard, a timid animal rather common about kampongs, enters a house it also brings good luck. A good antoh gave it the order to come, and it means much paddi, a gutshi, and other good things. Three fowls must be sacrificed and the people also dance.

CHAPTER XXXIV

FUNERAL CUSTOMS OF THE KATINGANS—DEPARTURE FROM KASUNGAN—AN ATTEMPTED VISIT TO SEMBULO—INDIFFERENT MALAYS—A STRANGE DISEASE—THE BELIEF IN TAILED PEOPLE—THE LEGEND OF THE ANCESTOR OF TAILED MEN

When a liao departs through the top of the head and death occurs, gongs are beaten for twenty−four hours. Five or six men set to work to make a beautiful coffin similar to the one already described; this is often finished in a day and the corpse, having been washed, is immediately placed within it. For a man a new chavat of wood fibre is adjusted around the loins, without other vestments. Another day is consumed in the work of decorating the coffin, which is done by men, while women weave diminutive mats, which are left less than half finished and are laid on top of the casket. For three days and as many nights the remains are kept in the house, and, if a man, his duhong (ancient knife), parang, knife, spear, sumpitan, betel box, tobacco container, and much food are placed nearby.

After these matters have received attention, food is eaten by those present. Fires are kept burning within the house and also outside, and after each meal the people strike one another's legs with firebrands in order to forget their grief. Members of the family, who begin to wail immediately after his death, continue to do so constantly for seven days, and they wear no red garments until after the tiwah feast which constitutes his second funeral. The coffin is buried in the ground or placed on a crude platform, and, when this work is finished, thorough ablution in water containing leaves which possess qualities especially adapted to this purpose is the rule for everybody concerned. This is done to the end that no odour of the dead shall linger, thus exposing the living to danger from the bad antoh that is responsible for the unfortunate event which necessitated their recent activities. Later, all partake of tuak, including the children.

After this preliminary disposal of the body the family begins to plan for the second and final funeral, which is considered a compensation to the departed soul for the property he left behind. Caution demands that they be very punctilious about this, for the ghost, though believed to be far above this plane, is thought to be resentful, with power to cause misfortunes of various kinds and therefore is feared. Until recently, when a man of means died, a slave had to be killed and his head placed on top of the coffin. When time for the second funeral, the tiwah, came round another slave was killed and his head hung near by. They are his attendants in the next life, but many more and elaborate arrangements are necessary to satisfy the demands of the liao, and they must be fully complied with on the celebration of the tiwah, the most elaborate of all feasts in Borneo.

When the deceased is well−to−do this observance may follow immediately, but usually years go by and many liaoes are served at the same time. On the great occasion the coffin is put on a big fire for a couple of hours until the flesh has been burned from the bones, which are then collected in a small box and placed in a house of limited proportions especially constructed for this purpose and called sandung. It is made of ironwood, and in these regions the people have a preference for placing it high above the ground, but it may also be put underground in a subterranean chamber also made of ironwood, which may take five or six months to construct and which is large enough to accommodate a family. The feast lasts one week, during which food and tuak are provided. Every night the women dance inside the house, around a tree composed of many bamboo stalks placed together so as to form a large trunk. As elsewhere mentioned, (Chapter XIV), the dancing, which is similar to that which follows the harvest, is for the benefit of the ghost and is distinct from the usual performance.

As soon as the tiwah feast has been decided upon the people start simultaneously to perfect the various arrangements, some looking for a water−buffalo or two, others beginning to make the several contrivances which the occasion demands. Many men are thus occupied for several months. There are experts in the required handiwork, though a skilful man may be capable of performing all the various tasks. In earlier days the different memorials and the box containing the bones were placed in front of the house of the deceased, but of late years government officials have made some changes in this arrangement. When preparing for a tiwah feast it was the custom to close the river for perhaps three months by suspending a rattan rope on which were hung many spears of wood, tail feathers of the great hornbill, and leaves of certain trees. After a head had been secured the impediment was removed, but the government has forbidden the temporary obstruction.

A most important matter is the construction of the device to which the water−buffalo, formerly the slave, is tied when sacrificed. In its make−up it expresses symbolically the rules of behaviour for the widow until after the feast has been celebrated. Its name is panyanggaran, an obscure word which probably may be derived from sangar, which means to kill; the place of killing.

The foundation is a large post, usually of ironwood, firmly planted in the ground; its top is pointed and a little below, on either side, is attached horizontally a piece of dressed wood like two arms. Further below a number of sticks are affixed to each side, pointing obliquely upward, and all on a plane with the arms above. These sticks, usually three on each side but sometimes more, are considered as spears, and the top of each is finished with a rosette representing four spear−points, called kalapiting. The post itself is also regarded as a spear and is called *balu* (widow), while the sticks are named *pampang−balu* (widow rules). It seems possible that the post also represents the woman, head, arms, and body being recognisable. However that may be, the attached sticks are regarded as so many rules and reminders for the widow. In Kasungan I saw in one case eight sticks, in another only four. The rules may thus vary or be applicable to different cases, though some are fundamental.

Assuming that the requirements are six in number, according to my informant, the following should be observed by the widow: (1) To make the tiwah feast; (2) to refrain from remarriage until the feast has been celebrated; (3) to abstain from sexual intercourse; (4) to remain in the same place until after the feast; (5) to ask permission from the family of the deceased if she wants to leave the kampong temporarily; (6) to wear no red garments until the feast has been completed. Should any of these injunctions be disregarded a gutshi, the value of which may be twenty florins, must be paid to his relatives. If the widow desires to marry earlier than the tiwah feast she is required to pay the entire cost of the celebration, and sometimes an additional amount.

A simpler device than the panyanggaran is also used, serving a similar purpose and called sapundo. It consists of an upright post carved to represent the face of a good antoh, with tongue hanging out. To this pillar is tied a water−buffalo (as substitute for the slave formerly employed), a cow, or pig. As the sapundo is much easier to make it is used by the orang kampong or poor people. For a rich man who has gone hence both contrivances may be erected.

Another matter demanding attention is the erection of a tall, rather slender pole of ironwood, called pantar. A gong or gutshi strung near the top signifies that the deceased was a person of wealth and prominence, while a wooden image of the rhinoceros hornbill occupies a lofty position on the pinnacle. On account of its ability to discern objects at a great distance, this bird is regarded as a good watchman to guard the sacrifice, whether it be a water−buffalo or other animal. The pantar itself simply means “in memoriam,” as if enjoining: “Don't forget this man!” These primitive monuments sometimes last over a hundred years, and more than one may be raised for the same man. Should it prove impossible to secure a water−buffalo, an ordinary cow may serve as sacrifice. The family thereby presents the animal's liao (soul) to the liao of the deceased, and the blian by dancing and sacrifice calls the latter to come and eat. Not only this, but the liao of every animal, bird, and fish which the family eats from the time of his death until the tiwah feast is given to him. Account is kept by incised cross−cuts on certain posts, notifying him of the number. I was told that when a raja died similar marks of account were made on a slave. The jaws of pigs or other animals, hanging by scores in the houses, together with heads of fish and legs of birds, are similar accounts for the same purpose, and all close with the tiwah feast.

A kapatong must be made, or, if the deceased were rich, perhaps two or three, which are inaugurated by the blian in the usual way, to be the ghost's attendants and guardians. The remaining duties to be performed are the making of a box or coffin for the bones to rest in, and the house in which it is to be deposited, either above or under the ground as may be decided. These tasks accomplished, no further responsibility devolves upon the widow or other members of the family.

On my return journey I stopped a few hours at a kampong in the vicinity to see some stones that, according to Katingan belief, are alive and multiplying. As my visit was expected, a fowl had just been sacrificed to these guardians of the kampong, and a fire made from bark was burning near by to keep the stones comfortable, so they would not be angry at being photographed. There were two roundish specimens, almost honeycombed with small cavities, one of them, scarcely twenty−five centimetres high, being regarded as masculine and the other, smaller and covered with green moss, was supposed to be of feminine gender. Originally, as the story goes, only these two were there, but later six “children” appeared, as evidenced by six smaller stones lying close to the “parents.” The domain held sacred to this interesting family was bounded by four pieces of wood, each about a metre in

length. Over all was extended a small square piece of red cloth supported on four upright sticks, which had been placed there two weeks before on behalf of a sick man whose recovery was attributed to this act of veneration. In front of the small enclosure lay four stones of inconsiderable size, lying in two pairs and supposed to be attendants; in the rear was a small house, reputed to be over three hundred years old, its purpose being to protect the stones, where offerings of food, with skulls of deer and pigs, were deposited.

Next day we met the *Selatan* on its way up the river, brought our luggage on board, and continued our journey. We had a disagreeable night before arriving at Bandjermasin; in fact, it is risky to travel south of Borneo in a steam−launch in January. As the wind was strong and the waves were too high for us to proceed, anchor was thrown and we were tossed about, the lamps went out, and, according to the captain, the boat nearly turned over. Mr. Loing, prostrate with seasickness, saved himself from being thrown overboard by grasping the rail.

After packing my collections I again set out for Sampit with the intention of revisiting Sembulo by another route, proceeding by prahu up the Kuala Sampit as far as possible, and then marching overland to the lake. The controleur was absent, but his native clerk and the kapala together got me the prahus and the men, such as the place afforded. As usual, the Malay coolies were late in arriving and began making many difficulties about various things. To cheer them I gave each f. 1.50 in advance, which made them all happy, and in buoyant, talkative spirits they immediately went off to buy rice, dried fish, tobacco, cigarettes, and other things. All was well, and at ten o'clock in the morning we finally started, with a native policeman in attendance.

An hour later the coolies wanted to cook rice. It did not take long to discover that they were not very useful, though the clerk had done his best. Two brothers were intolerably lazy, continually resting the paddles, lighting cigarettes, washing their faces, etc., the elder, after the full meal they had eaten, actually falling asleep at times. The interest of the men centred in eating and early camping, and we made slow progress, detained besides by a thunder−storm, as it was impossible to make headway against the strong wind. The man at the helm of the small prahu was intelligent, and from him I finally obtained information about a place to stop for the night.

At six o'clock we arrived at the mouth of the Kuala Sampit, where we found it difficult to effect a landing on account of the dilapidated condition of the landing−float. Some distance from the water stood a lonely house, in genuine Malay style, with high−gabled roof. The stairs afforded precarious access, a condition which may have been regarded as a protection, but more likely it was due to laziness and want of care. However that may have been, the interior was surprisingly substantial, with an excellent floor like that in a ballroom. I slept in a detached ramshackle room used as a kitchen, comfortable because of being open to the air.

In the morning the Malays were again too late. I was ready for a start at six o'clock, but about that time they began to cook. The small river, perhaps twenty metres wide, is deep enough to have allowed a steam−launch of the *Selatan's* dimensions to go as far as the kampong Rongkang, our first destination, and there is little current. At five o'clock we had to stop to give the men opportunity to prepare their rice, and in the evening we arrived at Rongkang. The gongs were being beaten lustily in the darkness; we thought it must be on account of a death, which proved to be the case, a woman having died some days before. The house which was placed at my disposal was more nearly airtight than usual.

The kapala said it was difficult to get men, but he would do his best. A strange epidemic had lately appeared, and some deaths had occurred in the kampongs of this region. In the room I occupied a woman had recently recovered from an attack of a week's duration. The disease, which probably is a variety of cholera, was described to me as being a severe diarrhoea accompanied by vomiting, paralysis, and fever, the crisis occurring in three to five days. The disorder appears to rise from the feet, and if it settles between the liver and heart may prove fatal in half a day. As I learned later, this illness, which the Malays call men−tjo−tjok, is usually present in the inland region of the Sampit River, and is also found on the upper parts of the Kahayan and Pembuang Rivers.

People in this neighbourhood were lappar (hungry), having no rice, and the men were absent in the utan looking for rattan, white damar, and rubber, which they exchange for rice from Chinese traders. Under such circumstances, chiefly women and children are left in the kampongs. Of nearly thirty men needed for my overland trip, only three could be mustered here. One Dayak who was perfectly well in the evening came next morning to consult me about the prevalent illness which he had contracted during the night. The only available course was to return to Sampit.

The name of the Dayaks here and on Lake Sembulo is Tamoan (or Samoan), with intermixture of Katingans, who are said to understand each other's language. Most of these friendly natives had fair−sized beards, some only

mustaches. The elder men complainingly said that the younger ones no longer want to tatu nor cut the front teeth. No haste was apparent about making the coffin for the woman who had been dead four days; although not yet commenced they said it would be completed that day.

The left bank of the river is much higher than the right, which is flooded, therefore the utan on that side presents a very different appearance, with large, fine−looking trees and no dense underbrush. All was fresh and calm after the rain which prevails at this season (February). There were showers during the afternoon, at times heavy, and the Malays were much opposed to getting wet, wanting to stop paddling, notwithstanding the fact that the entire prahu was covered with an atap. As we approached the mouth of the river, where I intended to camp for the night, I noticed a prahu halting at the rough landing place of a ladang, and as we passed it the rain poured down. When the single person who was paddling arose to adjust the scanty wet clothing I perceived that it was a woman, and looking back I discovered her husband snugly at ease under a palm−leaf mat raised as a cover. He was then just rising to walk home. That is the way the men of Islam treat their women. Even one of the Malay paddlers saw the humour of the situation and laughed.

At Rongkang I was told the legend of the dog that in ancient times had come from the inland of Borneo to Sembulo, where it became progenitor of the tailed people. In various parts of Borneo I heard about natives with short tails, and there are to−day otherwise reliable Dayaks, Malays, and even Chinese, who insist that they have seen them. Especially in regard to their presence at the lake of Sembulo, at the kampong of the same name, the consensus of opinion is strong. That place is the classical ground for the rumour of tailed men, and I thought it worth while, before leaving Borneo, to make another attempt later to reach Sembulo and investigate the reasons for the prevalent belief in tailed humans in that locality. The most complete legend on this subject I obtained from a prominent ex−district kapala, Kiai Laman, a Kahayan Dayak converted to Islam. He has travelled much in certain sections of Borneo, is interested in folklore matters, and told his stories without apparent errors or contradictions. The tale here rendered is from the Ot−Danums on the Upper Kahayan River.

A male dog called Belang started out to hunt for game—pig, deer, plandok. The kampong heard him bark in the manner common to dogs when on the trail of an animal, and then the baying ceased. The owner watched for the animal to return, but for half a year there was no news of him. In the meantime the dog had gone to Sembulo, making the trip in fifteen days. He appeared there in the shape of a man, took part in the work of the kampong, and married. His wife bore a child who had a tail, not long, about ten centimetres. “I do not like to tell a lie,” said my raconteur. “What the sex was I do not know, but people say it was a male infant. She had another child, a female, also with a tail.”

In the ladang the woman thought the crying of her children sounded very strange. “It is not like that of other infants,” she said. “Other people have no tails and you have; you look like the children of a dog.” Their father replied: “In truth I am a dog,” and immediately he resumed his natural form, ran away, and after an interval arrived in the Upper Kahayan, where his owner welcomed him, and the dog lived to old age and died.

In due time the two children married and had large families, all of whom had tails, but since the Malays came and married Sembulo women the tails have become shorter and shorter. At present most of the people have none, and those that remain are not often seen because clothes are now worn; however, many travellers to Sembulo have beheld them.

The rendering from Rongkal is similar, with this difference: The man from Upper Kahayan followed his dog—which at sight of his master resumed canine form—and killed it. According to a Malay version, a raja of Bandjermasin was much disliked and the people made him leave the country. He took a female dog with him in the prahu and went to Sembulo, where he had children all of whom had tails.

CHAPTER XXXV

A VISIT TO KUALA KAPUAS—A BREED OF STUMP−TAILED DOGS—THE SHORT−TAILED CATS OF BORNEO—A SECOND EXPEDITION TO LAKE SEMBULO−NATIVES UNDISMAYED BY BERI−BERI—THE TAMOANS—THE PRACTICE OF INCISION

The second trip to Sembulo had to be postponed until the return of the controleur of Sampit from an extended tour, when the steam−launch *Selatan* would again be placed at my service. During the weeks of waiting I made a trip to Kuala Kapuas, northwest of Bandjermasin. The Kapuas River is broad here, I should say at least 600 metres; if there is any wind one cannot cross because the prahus are all made of iron−wood and sink easily, owing to the fact that they are heavy and do not accommodate themselves to the waves. A German missionary and family had been here ten years. The children looked a little pale but strong, and had never had malaria nor children's diseases.

I soon became convinced that there was little here for me to learn. The Dayaks have been too long exposed to Malay and European influences, though still able to make splendid mats, for which this place is well known. Malay ascendancy is strong on the lower courses of the two great rivers that meet here, on the Kapuas as far as Djangkang, on the Kahayan as far as Pahandut. I carried away mud for future zoological examination from the bottom of a pool, ten minutes walk from the shore. There are always small fish in it, and three or four times a year it is flooded. In dry seasons, although not every year, the water of the sea reaches as far as Mandumei.

In Bandjermasin my attention was drawn to an interesting breed of stump−tailed dogs which belonged to Mr. B. Brouers. The mother is a white terrier which has but half a tail, as if cut off. When she had pups, two had stump tails, two had long ones, and one had none; her sister has no tail. Though the fathers are the ordinary yellowish Dayak dogs with long tails, the breed apparently has taken nothing or next to nothing from them. They are all white, sometimes with hardly noticeable spots of yellow.

Nobody who has travelled in Borneo can have failed to notice the great number of short−tailed cats. In Bandjermasin those with long tails are very rare, and among Malays and Dayaks I do not remember ever having seen them. They are either stub−tailed or they have a ball at the end of a tail that is usually twisted and exceptionally short. These cats are small and extremely tame, and can hardly be pushed away with a kick, because they have always been used to having their own way in the house. They are more resourceful and enterprising than the ordinary domestic cat, using their claws to an almost incredible extent in climbing down perpendicular wooden walls, or in running under the roof on rafters chasing mice. I have twice photographed such cats, a liberty which they resented by striking viciously at the man who held them and growling all the time. Their accustomed food is rice and dried fish.

The steamship *Janssens* had recently reduced its already infrequent sailings for Singapore, which caused some delay, but finally, toward the end of March, I embarked for Sampit. I was glad to see the controleur, who came down to the pier, for the rare occasions when steamers call here are almost festive events, and arrangements were at once made for my journey to Sembulo. At Pembuang we took on board the native kapala of the district, who was to accompany me; he also brought an attendant, a cook, and a policeman, all natives. Twelve hours later, when we arrived at the kampong Sembulo, the kapala who came on board the *Selatan* informed us that no Dayaks were there. As the lake was low and the water continued to fall it was impossible to proceed to Bangkal, the other kampong, or to remain here more than a few days. Therefore, at my request the native authorities agreed to have the Bangkal Dayaks congregate here, the kapala himself undertaking to bring them.

The population of the kampong Sembulo, formerly called Pulau Tombak, at the present time is Malay, comprising more than two hundred full−grown men, nearly all recent arrivals from Bandjermasin, Sampit, Pembuang, and other places. Very little rice is planted because the soil is sandy and unsuited to cultivation, therefore the inhabitants confine their activities mainly to rubber gathering. At that time about a hundred men were busy in the jungle on the opposite side, gathering white rubber, which is plentiful in the surrounding country. They cross the lake in their small prahus, pole them up the streams, and remain perhaps three months in the utan working under adverse conditions. When engaged in their pursuit they must always stand in water, which covers the ground and is usually shallow but at times reaches to the armpit.

Four weeks previously an epidemic of beri−beri had started with a mortality of one or two every day. When attacked by the disease they return to the kampong but only few recover, most of them dying from one or the other of the two forms of beri−beri. Nevertheless, the remainder continue the work undismayed—"business going on as usual." In the tropics life and death meet on friendly terms. "That is a sad phase of this country," said a Briton to me in India; "you shake hands with a man to−day and attend his funeral to−morrow."

At its deepest part the lake measures about seven metres. From May to August, when the Pembuang River is small and the lake is low, the depth is reduced to a metre. People then must walk far out to get water. Every afternoon we had gales accompanied by heavy rain from the northeast, although once it came from the southwest, and the *Selatan* had to put out another anchor. I was told that similar storms are usual every afternoon at that season (April), during which prahus do not venture out; apparently they also occur around Sampit and arc followed by calm nights.

Eighteen Dayaks were brought here from Bangkal. Of these, nine were Tamoan, the tribe of the region, eight Katingan, and one Teroian (or Balok) from Upper Pembuang. They were measured, photographed, and interviewed. One man looked astonishingly like a Japanese. The name of the tribe, Tamoan, also pronounced Samoan, means to wash. The tatu marks are the same as those of the Katingans. At present these natives have only six kampongs, three of them above Sampit. Cultivating rice was very difficult, they complained, on account of the poor soil and wet weather. The lake has few fish and they cannot be caught except when the water is low. There are no large serpents here, and neither snakes, dogs, nor crocodiles are eaten; but the rusa is accepted as food. Fruits, as the durian and langsat, are rather scarce.

Fire is made by twirling, and these natives use the sumpitan. They know how to make tuak, crushing the rice, boiling it, and then pouring it into a gutshi until the vessel is half full, the remaining space being filled with water. In three days the product may be drunk, but sometimes it is allowed to stand a month, which makes it much stronger. If there is no tuak there can be no dancing, they said. Many remarked upon the expense of obtaining a wife, the cost sometimes amounting to several hundred florins, all of which must be earned by gathering rubber. The tiwah feast is observed, but as to legends there are none, and their language and customs are disappearing.

These Tamoans are disintegrating chiefly on account of the ravages of cholera. About forty years previously an epidemic nearly extinguished Bangkal, and there was another in 1914. The result is that the population has changed, people from other kampongs, at times from other tribes, taking the places of the dead. At the kampong Sembulo there appear to be no Tamoans remaining, the Malays having easily superseded them.

Although my journey to the lake yielded no evidence to substantiate the legend connected with it, because I found no Dayaks left "to tell the tale," still, satisfaction is derived even from a negative result. Having accomplished what was possible I returned to Sampit, arriving almost at the same time a sailing ship came in from Madura, the island close to northeastern Java. It was of the usual solid type, painted white, red, and green, and loaded with obi, a root resembling sweet potatoes, which on the fourth day had all been sold at retail. A cargo of terasi, the well−known spicy relish made from crawfish and a great favourite with Malays and Javanese, was then taken on board.

In the small prison of Sampit, which is built of iron−wood, the mortality from beri−beri among the inmates was appalling. Nine men, implicated in the murder of two Chinese traders, in the course of eight months while the case was being tried, all died except a Chinaman who was taken to Bandjermasin. I understood a new prison was about to be erected. It seems improbable that ironwood has any connection with this disorder, but Mr. Berger, manager of the nearby rubber plantation, told me the following facts, which may be worth recording: Six of his coolies slept in a room with ironwood floor, and after a while their legs became swollen in the manner which indicates beri−beri. He moved them to another room, gave them katjang idju, the popular vegetable food, and they soon recovered. He then replaced the ironwood floor with other material, and after that nobody who slept in the room was affected in a similar way.

I met in Sampit three Dayaks from the upper country of the Katingan on whom the operation of incision had been performed. According to reliable reports this custom extends over a wide area of the inland, from the upper regions of the Kapuas, Kahayan, and Barito Rivers in the east, stretching westward as far as and including the tribes of the Kotawaringin. Also, in the Western Division on the Upper Kapuas and Melawi Rivers, the same usage obtains. In Bandjermasin prominent Mohammedans, one of them a Malay Hadji, told me that the Malays also practise incision instead of circumcision. The Malays, moreover, perform an operation on small girls, which

the Dayaks do not.

The controleur invited me to take part in a banquet which he gave to celebrate the completion of a road. There were present Malay officials, also Chinamen, and one Japanese. The latter, who arrived at Sampit one and a half years before with forty florins, had since increased his capital to a thousand through the sale of medicines to natives whom he reached by going up the rivers. We were seated at three tables, twenty−eight guests. The natives were given viands in addition to the menu provided, because they must have rice. Their women had helped to cook—no small undertaking for so many in an out−of−the−way place like Sampit. It was an excellent dinner; such tender, well−prepared beef I had not enjoyed for a long time. Claret, apollinaris, and beer were offered, the latter appearing to be the favourite. Women were served in another room after the men had dined.

FOLKLORE OF SOME OF THE TRIBES IN DUTCH BORNEO VISITED BY THE AUTHOR

1. THE MOTHERLESS BOY

(From the Penyahbongs, kampong Tamaloe)

Ulung Tiung was left at home by his father who went out hunting. Borro, the cocoanut−monkey, came and asked for food, but when Ulung gave him a little he refused to eat it and demanded more. The boy, who was afraid of him, then gave more, and Borro ate until very little remained in the house. The monkey then said, “I am afraid of your father, and want to go home.” “Go,” replied the boy, “but return again.” When the father came home in the evening he was angry that the food had been taken.

The following day when the father went out hunting, Borro again came asking for food. The boy, at first unwilling, finally yielded; the monkey ate with much gusto and as before wanted to go home. “Do not go,” said the boy, “my father is far away.” “I smell that he is near,” said Borro, and went.

When the father returned in the evening and saw that the food again had been eaten he was very angry with the boy, who replied: “Borro ate it—I did not take any.” Whereupon the father said: “We will be cunning; next time he comes tell him I have gone far away. Make a swing for him near your mat, and when he is in it tie rattan around him and swing him.”

The father went away and the monkey came again and asked for food, and got it. When he had eaten the boy said: “You had better get into the swing near my mat.” Borro liked to do that and seated himself in it, while the boy tied rattan around him and swung him. After a little while the monkey, fearing that the father might come back, said he wanted to get out, but the boy replied, “Father is not coming before the evening,” at the same time tying more rattan around him, and strongly, too.

The father came home and fiercely said: “You have been eating my food for two days.” Thereupon he cut off Borro's head, and ordered his son to take him to the river, clean him, and prepare the flesh to be cooked. The boy took Borro's body to the river, opened it and began to clean it, but all the small fish came and said: “Go away! What you put into the water will kill us.” The boy then took the monkey some distance off and the big fish came and said: “Come nearer, we want to help you eat him.”

The sisters of Borro now arrived, and his brothers, father, children, and all his other relatives, and they said to Ulung Tiung: “This is probably Borro.” “No,” he said, “this is a different animal.” Then the monkeys, believing what he said, went away to look for Borro, except one of the monkey children, who remained behind, and asked: “What are you doing here?” “What a question!” the boy answered; “I am cutting up this animal, Borro.”

The child then called all the monkeys to return, and they captured Ulung Tiung and carried him to their house and wanted to kill him. “Don't kill me,” he said, “I can find fruit in the utan.” The monkeys permitted him to do that, and told him to return in the evening, but the boy said that first he would have to dream.

In the morning the monkeys asked him what he had dreamed. “There is plenty of fruit in the mountain far away,” he answered, pointing afar, and all the monkeys went out to the mountain leaving their wives and children behind. When they were all gone Ulung Tiung killed the women and children with a stick, and went home to his father. “I killed the women and children,” he declared, “but the men had not come back.” “We will watch for them with sumpitan,” said his father, and when the monkeys returned and found that all who had remained at home were dead, they began to look for Ulung Tiung, but he and his father killed half of them with sumpitan and the rest ran away.

NOTE.—Ulung Tiung is the name for a boy whose mother is dead, but whose father is alive. For the sake of convenience I have maintained the Malay name “borro” for the cocoanut−monkey.

2. THE FATHERLESS BOY

(From the Penyahbongs; kampong Tamaloe)

Ulung Ela made a fish−trap and when he returned next morning he found it full of fish. He put them in his rattan bag, which he slung on his back and started for home. As he walked, he heard an antoh, Aaton Kohang, singing, and he saw many men and women, to whom he called out: “It is much better you come to my place and sing there.” Aaton Kohang said: “Very well, we will go there.” The boy continued his march, and when he came home he gave one fish to his mother to roast, which she wrapped in leaves and put on the live coals. He also prepared fish for himself, ate quickly, and begged his mother to do the same. The mother asked: “Why do you hurry so?” The boy, who did not want to tell her that he had called an antoh, then said that it was not necessary to hurry.

After they had finished eating, in the evening Aaton Kohang arrived with many men and many women. They tickled the mother and her boy under the arms until they could not talk any more and were half dead, took what remained of the fish, and went away. The two fell asleep, but ants bit them in the feet and they woke up and saw that all the fish were gone. “Ha!” they said: “Aaton Kohang did this,” and they ran away.

NOTE.—Ulung Ela is the name for a boy whose father is dead, but whose mother is alive.

3. THE TWO ORPHANS

(From the Penyahbongs; kampong Tamaloe)

Two small sisters, whose father and mother had died, went with the women to look for sago. The tree was cut and the sago, after having been beaten, was put into the large rattan bag. The younger child, who was sitting close to the bag, dropped asleep and fell into it. The other girl came to look for her sister but could not find her. She had disappeared, and when the women saw that the bag was already full they all went home. On returning next day they found plenty of sago inside of the tree, and had no difficulty in filling their bags.

NOTE.—Ulung Ania is the name for the elder of the two girl orphans. Ulung Kabongon is the name for the younger. When her elder sister died the latter became obon, and her name became Obon Kabongon.

4. THE TREE OF WHICH ANTOH IS AFRAID

(From the Penyahbongs; kampong Tamaloe)

Tabedjeh wanted to go to the place where a girl, Inyah, was living. On the way he met an antoh in the shape of a man with whom he began talking. Antoh said: “I am going to catch Inyah and eat her.” Tabedjeh then drew his parang and cut off his head. But a new head grew, and many more, so that Tabedjeh became afraid and fled, with antoh running after him. He lost his parang, then, after a while, he stopped and took sticks to strike antoh with, but every time he struck the stick was wrested from him, and he had to take flight again.

He ran up on a mountain and antoh, in close pursuit, caught up with him sitting on a fallen tree. Tabedjeh was tired and short of breath, but when antoh saw what kind of a tree he was sitting on he said: “You may remain there. I cannot eat you now because I am afraid of that tree.” Tabedjeh took a piece of the wood of the tree, which is called klamonang, and he went to the house of Inyah to show her the tree of which antoh is afraid, and they had their wedding at once.

5. LEAVES THAT BAFFLED ANTOH

(From the Penyahbongs; kampong Tamaloe)

Two brothers were walking in the utan, with sumpitans, when they met a pig which one of them speared. The quarry became furious and attacked the other one, but they helped each other and killed the pig, ate what they wanted, and continued their hunting.

Next they met a rhino which they killed. As they began to take off the hide, cutting into his chest, the rhino became alive again, and the hide turned out to be the bark of a tree. The two ran home, but the rhino came after them, so they again had to flee, pursued by him, until they came across a small tree called mora, of which antoh is afraid. They gathered some of the leaves, and as soon as the rhino saw that he ran away.

6. PENGANUN, THE HUGE SERPENT

(From the Penyahbongs; kampong Tamaloe)

The mother of Daring's wife ordered him to go out and hunt for animals to eat, but said they would have to be without bones. He searched for a month, and all that he got had bones. Finally he brought back a leech, which she ate. Then she said: “Go and look for penganun,” the huge serpent with the golden horn. He met the monster and used all his poisoned darts before it succumbed. He left it there and went home. “Have you got the big serpent?”

she asked him. “Yes!” he answered. She then went out to bring it in, but she cut off only a little of the flesh, which she brought back. It was cooked in bamboo, and the people in the house ate it, but before they had finished the meal they became crazy—fifteen of them. The affected ones, as well as the bamboo in which the cooking had been done, turned into stone, but the meat disappeared. Daring and his wife, who had not partaken of the meal, escaped.

NOTE.—There exists in Borneo a huge python, in Malay called sahua, which is the basis for a superstitious belief in a monster serpent, called penganun, the forehead of which is provided with a straight horn of pure gold. The tale is possibly influenced by Malay ideas. The Penyahbongs have a name for gold, bo−an, but do not know how to utilise the metal.

7. HOW THE PENGANUN WAS CAUGHT ALIVE

(From the Penyahbongs; kampong Tamaloe)

Two young girls, not yet married, went to fish, each carrying the small oblong basket which the Penyahbong woman is wont to use when fishing, holding it in one hand and passing it through the water. A very young serpent, of the huge kind called penganun, entered a basket and the child caught it and placed it on the bark tray to take it home.

Penganun ate all the fish on the tray, and the girls kept it in the house, catching fish for it, and it remained thus a long time. When it grew to be large it tried to eat the two girls, and they ran away to their mother, who was working on sago, while their father was sleeping near by. Penganun was pursuing them, and he caught the smaller one around the ankle, but the father killed the monster with his sumpitan and its spear point. With his parang he cut it in many pieces and his wife cooked the meat in bamboo, and they all ate it.

NOTE.—Penganun, see preceding tale. The sumpitan (blow−pipe) has a spear point lashed to one end, and thus also may serve as a spear.

8. THE FATHERLESS BOY

(From the Saputans; kampong Data Laong)

A woman was going to the ladang in the morning, and she said to her young son, Amon Amang, whose father was dead: “When the sun comes over the tree there you must begin to husk paddi.” She then went away to the ladang while the boy remained at home. He carried the paddi, as well as the oblong wooden mortar, up into a tree. There he began to work, and the mortar and the paddi and the boy all tumbled down because the branch broke. A man helped the half−dead boy to come to his senses again, throwing water on him, and when the mother returned she was very angry to see the mortar broken and the paddi strewed all about. “I told you to husk paddi in the house when the sun came over the tree,” she said. “Better that you now go and hunt birds.”

The boy then decided to hunt. He climbed a tree and put up snares to catch birds. He caught a great many big hornbills, which he fastened alive to his loin cloth, and they began to fly, carrying the boy with them to a big tree, where they loosened themselves from him, left him in a cleft, and all flew away. The tree was very tall, but he climbed down a fig tree which grew beside it, descended to the ground, and went home.

His mother was not pleased that he did not bring any birds, and he told her what had happened. “Why all this?” she said. “You fell from the tree! You should have killed the birds,” she declared reproachfully.

NOTE.—Amon Amang means the husband's child. (Amon = father; Amang = child.)

During my stay of two weeks at Data Lahong fortunate circumstances enabled me to gather a considerable number of Saputan tales. Several prominent men from neighbouring kampongs visited me and were willing to tell them, while of equal importance was the fact that a Mohammedan Murung Dayak in my party spoke the language well and made a very satisfactory interpreter.

On the other hand, I remained among the Penihings for many weeks, but the difficulty of finding either men who knew folklore or who could interpret well, prevented me from securing tales in that tribe. However, there is strong probability that much of the folklore told me by the Saputans originated with the Penihings, which is unquestionably the case with No. 16, “Laki Mae.” The reason is not far to seek since the Saputans appear to have been governed formerly by the Penihings, though they also are said to have had many fights with them. According to information given me at Long Tjehan, Paron, the Raja Besar in the kampong, until recent years was also raja of the Saputans.

9. THE ANTOH WHO MARRIED A SAPUTAN

(From the Saputans; kampong Data Laong)

Dirang and his wife, Inyah, went out hunting with dogs, and got one pig. She then cut rattan to bind the pig for carrying it home, and the man in tying, broke the rattan. He became very angry and told his wife to look for another piece of rattan. She went away and met an antoh in the shape of a woman who asked her: “Where are you going?” “To look for rattan,” was the answer, and “What is your name?” Inyah asked. “I am Inyah Otuntaga,” the antoh answered. Inyah then said: “Take this rattan and give it to my husband.”

Inyah Otuntaga brought the rattan to the man, who tied the babi all around, and she took it up and carried it home. The man, meanwhile, followed her, thinking it was his wife. She went to this side and that side in the jungle, frequently straying. “What is the matter,” he said, “don't you know the way?” “Never mind,” she retorted, “I forgot.” Arriving at the house she went up the wrong ladder, and the man was angry and said: “Don't you know the right ladder?” She answered: “I cannot get up the ladder.” “Come up and walk in,” he exclaimed, and began to think she was an antoh.

She entered the room and slept there, lived with him ever after, and had two children. His former wife, much incensed, went to the house of her father, and after a while she had a child. Her little boy chanced to come to the house of his father, who asked his name. “I am the son of Inyah,” he said. Then the father learned where his former wife was, and he went to fetch her, and afterward both wives and their children lived together.

10. LAKI SORA AND LAKI IYU

(From the Saputans; kampong, Data Laong)

Two men, Sora and Iyu, went into the utan to hunt with sumpitans. While Iyu made a hut for the two, Sora went to look for animals and came across a pig, which he killed. He brought the liver and the heart to the hut and gave them to Iyu to cook. When the cooking was finished Iyu advised him of it, and the two sat down to eat. It was already late in the afternoon and Iyu, whose duty it was to fetch the pig, waited until next day, when he went away to bring it in, but instead he ate it all by himself, and then returned to the hut and told Sora what he had done. It was now late in the evening and they both went to sleep. The following morning Sora went out again with his sumpitan, but chased all day without meeting an animal, so he took one root of a water−plant called keladi, as well as one fruit called pangin, and went home. The keladi was roasted, but the fruit it was not necessary to prepare. They then sat down to eat, but could not satisfy their hunger, and Iyu was angry and asked why he brought so little. “I did not bring more,” Sora answered, “because it is probable the owner would have been angry if I had.” Iyu said: “Tomorrow I shall bring plenty.”

Next morning Iyu came to the place where Sora had found the root and the fruit, and he ate all that remained there, but this belonged to an antoh, called Amenaran, and one of his children saw Iyu eat the root which he did not cook, and also saw him climb the tree and eat the fruit. He went and told his father, the antoh, who became angry, spoke to Iyu about it, and wanted to know who had given him permission.

Iyu, who was up in the tree still gorging himself with fruit, said he was not afraid and he would fight it out that evening. Amenaran stood below and lightning poured forth from his mouth and thunder was heard. Iyu said: “I have no spear, nor parang, but I will kill that antoh.” And the big pig he had eaten and all the roots and all the fruits that he had been feeding on, an immense quantity of faeces, he dropped on Amenaran's head, and it killed him. Iyu returned home and told Sora that he had put Amenaran to death. They then went out and killed many animals with the sumpitan and returned to the kampong. “Now that antoh is dead we can no more eat raw meat nor much fruit,” said Iyu. Long ago it was the custom to eat the meat raw and much of it, as well as much fruit, and one man alone would eat one pig and a whole garden. Now people eat little. With the death of antoh the strong medicine of the food is gone, and the Saputans do not eat much.

NOTE.—Laki is the Malay word for man or male, adopted by many of the tribes. The native word for woman, however, is always maintained. Keladi is a *caladium*, which furnishes the principal edible root in Borneo.

11. THE WONDERFUL TREE

(From the Saputans; kampong Data Laong)

Tanipoi bore a female infant, and when the child had been washed with water on the same day, the father gave her the name Aneitjing (cat). Years passed, and the girl had learned to bring water in the bamboo and to crush paddi. And the mother again became pregnant, and in due time had another little girl which was called Inu (a kind of fruit).

Now, among the Saputans the custom long ago was that the woman who had a child should do no work during forty days. She must not bring water, nor husk paddi, nor cook. She remained in the house and took her bath in

the river daily. She slept much and ate pork cooked in bamboo, and rice, if there was any, and she was free to eat anything else that she liked. Her husband, Tanuuloi, who during this time had to do all the work, became tired of it, and he said to his wife: “I cannot endure this any longer, I would rather die.”

After he had cooked the meal and they had eaten he said: “Take the two children and go with me to the river.” All four of them went into a prahu which he paddled down stream until they came to a large rock in the middle of the river, where he stopped it. They all climbed on the rock, and the prahu he allowed to drift away. He then said to his wife: “You and I will drown ourselves.” “I cannot,” she said, “because I have a small child to suckle.” He then tore the child from the mother's breast and placed it on the rock. The two children and the mother wept, and he caught hold of one of her hands, dragged her with him into the water, and they were both drowned.

The two children remained on the rock all day. After sunset Deer (rusa) arrived. The older child called out; “Take me from here.” And Deer came to the stone and placed Aneitjing on his back, and behind her Inu, and carried them ashore. Deer then made a clearing in the utan and built a hut for them. He then went to the ladang to look for food, but before starting he said to the children: “I am going to the ladang. Maybe I shall be killed by the dogs. In that case you must take my right arm and my right eye and bring them here.”

Deer went away and was attacked by dogs. The two children heard the barking, and when they arrived the dogs were gone and Deer was found dead. The children took the right arm and the right eye and went home, made a clearing and dug a hole, where the arm and the eye were placed, and they covered the hole with earth. They often went to look at that place. After twenty days they saw a sprout coming up, and in twenty years this had grown into a big tree which bore all sorts of fruit and other good things. From the tree fell durian, nangka, and many other kinds of delicious fruit, as well as clothing, spears, sumpitans, gongs, and wang (money).

Rumour of this spread to the kampong, and two men arrived, Tuliparon, who was chief, and his brother Semoring. They had heard of the two young women, and they made a hut for themselves near by, but did not speak to the girls. They went to sleep and slept day after day, a whole year, and grass grew over them. Inu, the younger, who was the brighter of the two, said to Aneitjing: “Go and wake these men. They have been sleeping a long time. If they have wives and children in the kampong this will make much trouble for all of them.” Aneitjing then asked Tipang Tingai for heavy rain. It came in the evening and flooded the land, waking the two men who found themselves lying in the water. They placed their belongings under the house of the women and went to the river to bathe. They then returned and changed their chavats under the house. The women wanted to call to them, but they were bashful, so they threw a little water down on them. The men looked up and saw that there were women above and they ascended the ladder with their effects.

The girls gave them food, and Tuliparon said to Inu: “I am not going to make a long tale of it. If you agree I will make you my wife, and if you do not agree, I will still make you my wife.” Inu answered: “Perhaps you have a wife and children in the kampong. If you have, I will not, but if you have not, then I will.” “I am free,” he said, “and have neither wife nor child.” Reassured on this point she consented. His brother and Aneitjing agreed in the same way. The women said that they wanted always to live where they had the tree with so many good things. The men felt the same way, and they went to the kampong and induced all the people to come out there, and thus a new kampong was founded.

NOTE.—Tipang Tingai means the highest God, the same as the Malay Tuan Allah. It is also used by the Penyahbongs.

12. MOHAKTAHAKAM WHO SLEW AN ANTOH

(From the Saputans; kampong Data Laong)

Once upon a time three brothers, Mohaktahakam, Batoni, and Bluhangoni, started in the morning from the kampong and walked to another kampong where Pahit, an antoh, had a fish−trap. They were intent on stealing the fish, and as they went along they considered among themselves how they could take it. Pahit was very strong, but Mohaktahakam said: “Never mind, I am going to fight it out with him.” Arriving there they let the water out of the trap, and with parang and spear they killed lots of fish of many kinds, filling their rattan bags with them. Taking another route they hurried homeward. Their burdens were heavy, so they could not reach the kampong, but made a rough shelter in the usual way on piles, the floor being two or three feet above the ground. They cut saplings and quickly made a framework, called tehi, on which the fish were placed. Underneath they made a big fire which smoked and cured them. In the morning they had boiled rice and fish to eat, and then went out to hunt for animals with sumpitan. The fish meanwhile remained on the tehi, the fire being kept alive underneath.

Pahit found his trap dry and no fish there. “Why have people been bold enough to take the fish?” he said to himself. “They don't know I am strong and brave”; and, very angry, he followed their tracks. He had gone scarcely half−way when he smelled the fish, which was very fat. When he arrived at the camp he found the fish over the fire, but nobody there. He gathered some leaves together behind the camp and sat down upon them to wait the arrival of the men.

In the afternoon Batoni and Bluhangoni returned to camp carrying much pig and deer. He immediately caught hold of both of them, lifted them up and brought them down with force upon the rough floor of the hut, and both died. Pahit saw that places had been made for three men to sleep, and knowing that there must be another man coming he decided to wait. The two bodies he placed under the hut, on the ground. After a while Mohaktahakam came, carrying pig, deer, rhino, wild ox, and bear, and threw it all down near the drying fish, to cook it later. He was tired, having walked all day, and went up into the hut to smoke tobacco. Pahit saw this and went after him. He caught hold of the man to throw him down, but could not lift him. Mohaktahakam, very angry, caught Pahit by the arms, lifted him up, threw him against the floor and killed him. “Pahit spoke of being strong and brave, but I am stronger,” he said.

Mohaktahakam then made his brothers come to life again, and they cleaned all the animals they had caught and placed the meat on a tehi to dry and smoke. Then they cooked meat in bamboo and ate, afterward going to sleep. During the night one of them at times mended the fire, which was kept burning. In the morning, after eating, they went home to the kampong, carrying bags full of meat and fish.

NOTE.—Tehi, a framework for drying fish or meat, is called in Malay, salai.

13. THE MAGIC BABI BONE

(From the Saputans; kampong Data Laong)

Dirang left the kampong to hunt for heads, with three prahus and many men, armed with parangs, shields, sumpitans, and spears, and they also carried some rice for provisions. After a while the people who remained behind became very hungry, and one day Inyah, the wife of Dirang, went out to look for bamboo shoots to eat. She met a small babi (pig), caught it, and brought it home. In the kampong she asked the men to help her make a shed for it.

The babi, which was male, grew bigger and bigger. It was very strong, and when dogs, cats, or hens came near the shed it would kill and eat them. It was fierce and angry because it had not enough to eat, and finally it turned the shed over and killed and ate all the people. No one escaped but Inyah, who fled to another kampong, where she asked for help and the people permitted her to remain there.

Shortly afterward the babi arrived. All the people heard the noise it made as it came through the utan, breaking the jungle down. They said to Inyah: “You would better run away from here. We are afraid he may eat us.” Inyah went away, trying to reach another kampong. She got there and asked for help against the man−eating babi. Hardly had she received permission to remain before a great noise was heard from the babi coming along. The people, frightened, asked her to pass on, and she ran to another kampong. There was a woman kapala in that kampong who lived in a house that hung in the air. Inyah climbed the ladder, which was drawn up after her. The babi came and saw Inyah above, but could not reach her, and waited there many days.

Dirang, who was on his way back from the headhunting expedition, came down the river, and he said to one of his companions: “It is well to stop here and make food.” This chanced to be close to the place where Inyah was. They went ashore to make camp. Some of them went out to search for wood and met the babi, who attacked them, and they fled to their prahus. When Dirang, who was an antoh, saw his men on the run, he became very angry, went after the babi, and cut off its head. His men cut up the body and cooked the meat in bamboo, near the river, sitting on a long, flat rock. They ate much, and Dirang said that he now wanted to paddle down to the kampong, so they all started. Inyah had seen Dirang, and she said to the woman kapala: “Look! There is my husband. No other man would have been brave enough to kill the babi.” The woman kapala said: “I should like to have such a husband if I wanted one, but I am afraid of a husband.” Inyah said: “I want to go down.” And she walked over to the place where the men had been sitting on the rock, went upon it, and accidentally stepped on a bone left from the meal, which hit her on the inside of the right ankle. The bone was from the right hind leg of the babi, and was sharp, so it drew a little blood from the ankle.

She felt pain and went back to the house. Some time later the leg began to swell, and as time passed it grew bigger and bigger. The woman kapala said: “There must be a child inside.” “If that is the case,” said Inyah, “then

better to throw it away." "No, don't do that. Wait until the child is born and I will take care of it," said the kapala. When her time had come the child arrived through the wound made by the babi bone, and the kapala washed the child and took care of it. When two months old the child was given the name Obongbadjang. When he was fifteen years old he was as strong as Dirang.

Dirang had brought many heads to the kampong, but finding all the people dead and houses fallen down, he became angry and killed the slaves he had brought back. He then went out on another hunt for heads. When the prahus passed the kampong where Inyah was, all the people in the house saw them, and Obongbadjang, her young son, who had heard much of Dirang, went down to see him. "Where are you going?" asked Dirang. "I want to go with you," answered the boy. Dirang liked him, and let him into the prahu.

They travelled far and wide, and finally came to the kampong which they wanted to attack. Dirang went in from one end of the house and Obongbadjang from the other, and they cut the heads from all the people, men, women, and children, and met in the middle of the house. Dirang was wondering who this young man was who was strong like himself and not afraid. "My name is Obongbadjang," he said, "the son of Dirang and Inyah." He then ran away, although Dirang tried to keep him back, and he ran until he arrived where his mother was.

On seeing his son run away Dirang felt "sick in his throat," then collected all the heads, comprising the population of the whole kampong, put them in the prahus, and returned to look for his son and wife. He stopped at the same place where he had killed the big babi and made a hut. He then went to look for Obongbadjang and Inyah. When he was walking under the house, which was high up in the air, Inyah threw a little water down on him. He turned his head up and saw there was a house, but there was no ladder and he could not get up. They put out the ladder and he went up and met Inyah again, who, until then, he did not know was alive. He also met his son, and after remaining a little while he took them away to rebuild their kampong.

NOTE.—"Sick in his throat," Saputan mode of speech for deep emotional depression, is similar to our "feeling a choking in the throat." The Malays say: "Sick in his liver."

For the sake of convenience the Malay name babi for a pig, perfectly known to the Dayaks, has been maintained in this tale.

14. WHEN HUSBAND AND WIFE ARE ANTOHS

(From the Saputans; kampong Data Laong)

There were many young men who wanted to marry Inu Songbakim, a young girl, but she liked only one man, Monjang Dahonghavon, and, having obtained the consent of her father and mother, he shared her mat. One day he went out to work, making planks with his axe, while she remained at home cooking. When she had prepared the food she took it to him, and when she arrived at the place where he was working he looked at her as he was cutting with the axe and hurt himself. He died, and his father came and took the corpse to the house. Being an antoh he restored the life of his son, who became very angry with his wife for being the cause of his death. He wanted to kill her, but as she was very strong he could not do it, and instead, with his parang, killed her father and mother. His wife, in turn, became filled with wrath, and with a parang killed his father and mother.

The young man then left her to look for another wife, but could not find any that was to his liking, strong and good−looking, so after a while he decided to return to the wife he already had. "I like you much," she said, "but if you want to have me again you must make my father and mother alive again." "I will do that," he answered, "if you first will restore to life my father and mother." They were both antohs, so there was a general return to life, and the people from the two kampongs to which the families belonged came together and made the kampongs into one.

15. THE WOMAN, THE BIRD, AND THE OTTER

(From the Saputans; kampong Data Laong)

Many young men courted Ohing Blibiching, but she was difficult to please. Finally, she favoured Anyang Mokathimman because he was strong, skilful in catching animals, brave in head−hunting. She said: "Probably you have a wife." "No, I am alone," he said, and her father and mother having given consent, they then lived together.

After a while he said: "I want to go away and hunt for heads." She said: "Go, but take many men with you. If you should be sick, difficulties would be great." She then made rice ready in a basket, calculating that on a long journey they would depend more on the sago found in the utan. They would also kill animals for food, therefore, in addition to their parangs, the men took sumpitans along.

"If we have any mishaps," he said, "I shall be away two months. If not, I shall be back in a month." She remained in the kampong guarded by her father, mother, and other people, and after a while many young men began to pay her attention, telling her: "He has been away a long time. Maybe he will not return." One day at noon when she was filling her bamboo receptacles in the river as usual, taking a bath at the same time, she saw a fish sleeping, and caught it. She then lifted on her back the big−meshed rattan bag which held the bamboo receptacles, all full of water, and went home, carrying the fish in her hand. Before cooking it she went to husk paddi.

The bird Teong, who had heard she was beautiful, saw her and he liked her much. He flew to a tree from which he could get a good look at her where she was husking the paddi. In admiration he jumped from branch to branch until a dead one broke which fell down and wounded young Otter in the river under the tree. The mother of Otter became angry with Bird Teong for the injury. "I have been in this tree quite a while," Bird answered, "because I like to look at that woman. I did not know Otter was underneath. If you want damages, ask that woman there." "Why should I pay Otter?" the woman said. "I did not call Bird Teong. I have just finished pounding and am going to cook fish. This case we will settle tomorrow. I am hungry now." She went away and so did Bird and Otter. She cooked rice in one bamboo and the fish in another. Then she ate, after which she went to the river as the sun was setting, to take her bath. She soon went to sleep.

Early the next morning she made her usual tour to the river to bring water and take her bath, and when she had eaten, Bird and Otter arrived. Otter wanted damages from Bird, and Bird insisted that the woman should pay. She repeated that she knew nothing of Bird and had not asked him to come. As they were arguing, to her great relief her husband arrived. He brought many prisoners and many heads. "It is well you have come," she said. "Bird and Otter have made a case against me. I was husking paddi, and Bird liked to look at me. I did not know he was there in the tree for a long time. A branch fell down and wounded Otter's child, making her very angry, and she asks damages from me." "This case is difficult," the husband answered. "I must think it over." After a while he said: "The best thing to do is to give food to both." Bird was given fruit to eat and Otter fish, and they went home satisfied. All the people of the kampong gathered and rejoiced at the successful head−hunting. They killed pigs and hens, and for seven nights they ate and danced.

NOTE.—When an attack on men is decided upon the sumpitan is hidden and left behind after the spear−head has been detached from it and tied to a long stick. This improvised spear is the principal weapon on head−hunting raids, as well as on the chase after big game. The bird, called by the Saputans teong, is common, of medium size, black with yellow beak, and yellow around the eyes, also a little red on the head. It learns easily to talk, and is also common in Java.

16. LAKI MAE

(From the Saputans; kampong Data Laong)

The wife of Laki Mae was pregnant and wanted to eat meat, so she asked her husband to go out hunting. He brought in a porcupine, wild hens, kidyang, pig, and deer, and he placed all the meat on the tehi, to smoke it over fire, that it should keep. But the right hind leg of the porcupine was hung up by itself unsmoked, to be eaten next day. They had their evening meal and then went to sleep. In the night she bore an infant son, and, therefore, next morning another woman came to do the cooking. She took the hind leg and before proceeding to cook it, washed it. It slipped through a hole in the floor to the ground underneath. Looking through the hole she saw a small male child instead of the leg, and she told Mae of this.

"Go and take this child up and bring it here. It is good luck," he said. "It is my child too." It was brought up to the room and washed and laid to the wife's breast, but the child would not suckle. Mae said: "It is best to give him a name now. Perhaps he will suckle then." He then asked the child if it wanted to be called Nonjang Dahonghavon, and the child did not. Neither did it want Anyang Mokathimman, nor Samoling, nor Samolang. It struck him that perhaps he might like to be called Sapit (leg) Tehotong which means "Porcupine Leg," and the child began to suckle at once. The child of the woman was given a name two months later, Lakin Kudyang.

For two years the mother suckled the two, and then they were old enough to play behind the houses of the kampong. They saw many birds about, and they asked their father to give each of them a sumpitan. When they went out hunting the human boy got one bird, but the other boy got two. Next time the woman's son killed a plandok (mouse−deer), but the other one secured a pig. Their father was angry over this and said to "Porcupine Leg": "Go and kill the two old bears and bring the young ones here." He had recently seen two bears, with one

cub each, under the roots of a tree in the neighbourhood. The boy went, and the bears attacked him and tried to bite him, but with his parang he killed both of them, and brought the cubs along to the kampong, bringing besides the two dead bears. The father again sent him out, this time to a cave where he knew there were a pair of tiger−cats and one cub. “Go and kill the pair and bring the cub here,” he said. Again the boy was successful. Laki Mae did not like this and was angry.

In the evening “Porcupine Leg” said to his brother: “I have a long time understood that father is angry with me. Tomorrow morning I am going away. I am not eating, and I will look for a place to die.” His brother began to weep, and said he would go with him. Next morning they told their father they were going to hunt for animals and birds. But when they did not return in the evening, nor later, the mother said: “I think they will not come back.” Half a month later many men attacked the kampong. Laki Mae fought much and was tired. “If the boys had remained this would not have happened,” the people said angrily to him. In the meantime the human son began to long to return, and he persuaded “Porcupine Leg” to accompany him. They both came back and helped to fight the enemy, who lost many dead and retired.

NOTE.—This story is also found with the Penihings, from whom undoubtedly it is derived. *Laki*, see No. 10. *Tehi*, see No. 12.

17. SEMANG, THE BAD BOY

(From the Long−Glats; kampong Long Tujo)

A woman called Daietan had one child, Semang, who was a bad boy. He was lazy, slept day and night, and did not want to make ladang nor plant any banana nor papaya trees. His mother angrily said to him: “Why don't you exert yourself to get food?” Semang said: “Well, I will go tomorrow to search for something to eat.”

At sunrise next morning he went away in a prahu, paddling up−stream. He reached a kampong, and the name of the raja here was Anjangmaran. He could find no food, so he went on to the next kampong, and to another, but had no success, so he continued his journey, and then arrived at the fourth kampong. There were no people here. It was a large kampong with many houses, and grass was growing everywhere.

He went up into a room and there he found all sorts of goods; salt, gongs, many tempaians (large Chinese urns) in which paddi was stored, and tobacco. Semang said to himself, “I am rich. Here is all that I need.” And he lay down to sleep. In the night Deer (rusa) arrived and called out: “Is there any one here?” He ascended the ladder and lay down near the cooking place. Semang heard him, but was afraid to move, and slept no more. In the night he heard Deer talk in his sleep: “Tomorrow morning I am going to look for a small bottle with telang kliman. It is underneath the pole in front of the house.”

Semang said: “Who is talking there?” Deer waked up and became frightened, ran down the ladder, and got into Semang's prahu, where he went to sleep. Before dawn Semang arose and walked down toward the prahu. On his way he saw an ironwood pole in front of the room, went up to it, and began to dig under it. He found a small bottle which he opened, and he put his first finger into it. He was astonished to see that his finger had become white, and he said: “This must be good to put on the body.” He poured some into his hollowed hand and applied it all over his body and hair. His body became white and his clothes silken.

Pleased with this, Semang ascended the ladder, gathered together all the goods that he had found in the room, and began taking them to the prahu. There he found Deer asleep, and killed him with his spear. After bringing all the goods from the house to the prahu, Semang started down−stream. Owing to the magic liquid his prahu had become very large, and carried much, much goods, as well as the dead deer.

He travelled straight for the kampong, where he caught sight of his mother. “O, mother!” he cried, and went up the ladder carrying the bottle. He washed his mother with the liquid. She became young and beautiful, and it also gave her many beautiful garments. By the same aid Semang made the room handsome. Everything became changed instantly. The ceiling was of ironwood, and the planks of the floor were of a wood called lampong, which resembles cedar. Large numbers of brass vessels were there, and many gongs were brought from the prahu, besides a great quantity of various goods. The mother said: “This is well, Semang.” She felt that she no longer had cause to be troubled; that whatever she and Semang might need would come without effort on their part.

NOTE.—According to Long−Glat belief, the deer, called in Malay rusa, possesses a magic liquid which enables it to restore the dead to life. The name of the liquid is telang kliman (telang = liquid; kliman = to make alive).

18. ADVENTURES IN PURSUIT OF MAGIC

(From the Long−Glats, kampong Long Tujo)

Once there lived a woman, Boamaring, who was Raja Besar in a large kampong where people did not know how to work. They could not make ladangs nor prahus. Everything they needed came to them of its own accord, and the rajas of the neighbouring kampongs were afraid of her. This is the way it came about.

She heard a rumour of a musical instrument which could play by itself, and which had the power of bringing all necessary food. She said to her husband, whose name was Batangnorang, “Go to the limit of the sky and bring the instrument that plays by itself.” Putting on tiger skin, and carrying his parang and sumpitan, Batangnorang went into a small prahu which was able to fly, and it flew one month, to the end of the sky. He landed in a durian tree, near a small house covered with the tail feathers of the hornbill. Its walls were of tiger skins, the ridgepole, as well as the poles of the framework, were made of brass, and a carving of the naga stood out from each gable.

He heard music from inside the house, and saw a woman dancing alone to the tune of the instrument that played by itself. She was the antoh of the end of the sky, and he knew that she ate people, so he was afraid to come down, for many men since long ago had arrived there and had been eaten. Many corpses of men could be seen lying on the ground. From his bamboo cask he took a small arrow, placed it in his sumpitan, and then blew it out toward the dancing woman. The arrow hit the woman in the small of the back, and she fell mortally wounded. Then he flew down to the house, finished killing her with his spear, and cut her head off with his parang. He then went up to her room and took the musical instrument, her beautiful clothing, and beads, and placed all, together with the head, in his prahu. He also took many fine rattan mats, burned the house, and flew away in the sky. After a month he arrived in his kampong and returned to his wife. “Here is the musical instrument you wanted,” he said. “Good!” she answered, “what else did you hunt for?”

He placed it on the floor and asked it to play by striking it one time. Sugar, boiled rice, durian, cocoanuts began to fall down, also tobacco, salt, clothing—all the good things that they could wish for. The Raja Besar was greatly pleased and was all smiles, and the people of her kampong no longer found it necessary to work. Everything that they needed came when they wished for it, and all enjoyed this state of things.

When a month had passed she learned of a woman's hair ornament which was to be found in the river far away. It was of pure gold, and when one hung it up and struck it all sorts of food would drop from it. “Go and get that,” she told her husband. “It is in a cave underneath the waters of the river.”

Batangnorang made himself ready. He put on tiger skin, placed on his head a rattan cap with many tail feathers of the hornbill fastened to it, took his parang, his shield adorned with human hair, and his sumpitan. But he did not carry mats for bedding, nor food. He had only to wish for these things and they came. He then said farewell to his wife in a way that the Long−Glats use when departing on a long journey. She sat on the floor, and bending down he touched the tip of his nose to the tip of hers, each at the same time inhaling the breath as if smelling.

Batangnorang departed, stopping on the river bank, where he stood for a time looking toward the East, and calling upon the antoh Allatala. Then he went into the water, dived, and searched for ten days until he found the cave, inside of which there was a house. This was the home of the crocodile antoh, and was surrounded by men, some of them alive, some half dead, and many dead.

Crocodile was asleep in his room, and all was silent. Batangnorang went up on the gallery and sat down. After waiting a long time Crocodile awoke. He smelt man, went to the door which he opened a little, enough to ascertain what this was, and he saw Batangnorang. Then he passed through it and said to the stranger: “How did you come here? What is your name?” “I come from the earth above. I am Batangnorang.” He was afraid antoh would eat him, and Crocodile's sister being his mother he added timidly: “I have a mother. I do not know of a father,” he continued. “My mother, your sister, told me to go and meet my father down in the water.” “What necessity was there for my child to come here?” asked Crocodile. “I am looking for a woman's hair ornament of gold,” he answered. Crocodile said: “If you are my child then I will cook rice for you.”

They both went into the room, which was fine, made of stone; the roof was of gold, and there were many gongs and much goods there. Crocodile cooked rice, but as he wanted to try the stranger he took one man from those outside, cut him into many pieces, and made a stew. He then told him to eat, and being afraid to do otherwise, Batangnorang ate it. Crocodile then said: “Truly you are my child. Another man would not have eaten this stew.”

After the meal Crocodile put the remainder of the food away, with a tiny key opened a small steel trunk, took

out the gold ornament, and gave it to Batangnorang. “Give this to your mother, Crocodile. When she wants to use it, hang it up and place a beautiful mat underneath. Then strike it one time with the first finger. Whatever you ask for must come.”

Batangnorang took the hair ornament and placed it in the pocket of his shirt, put on his parang, and took his spear and shield. He then said farewell, and as he walked away he suddenly turned and thrust his spear into Crocodile's breast and killed him. Batangnorang carried away all that he desired, diamonds as large as hens' eggs, and much gold. He then went home, ascended to the room where his wife sat, and laid his weapons away.

He seated himself near his wife and produced the ornament. “I got this,” and handed it to her. “How do you use it?” she asked. He hung it up by a string and placed a fine rattan mat underneath. All the people in the kampong gathered to see this, women, men, and children. He then struck it with his first finger, when lo! and behold! there fell all around pork, boiled rice, vegetable stew, sugar−cane, papaya, durian, bananas, pineapples, and white onions. All present ate as long as they were able, and food continued to fall. After that people slept at night and arose in the morning to eat and do no work, because all that they wished for was produced immediately.

NOTE.−The flying prahu, mentioned in this legend, plays an important part in the religious exercises of the Ot−Danum, Katingan, and Kahayan. See Chapter XXXI. The head ornament of women is different in this tribe from those observed elsewhere in Borneo. It may be seen in the back view of the three Long−Giat women in Chapter XXVI. The tale shows Malay influence by such expressions as gold, diamonds, brass, shirt pocket, bottle. Allatala, the rendering of the Mahommedan Tuan Allah, is accepted as an antoh also by certain Dayak tribes in Southern Borneo. Steel trunks, as sold by Chinese or Malays, are much in favour with the Dayaks, and were observed wherever I travelled. It is one of the first articles that those who have taken part in an expedition to New Guinea will buy to take home. White onions are usually to be procured on travels among the Dayaks, and of course are not originally indigenous, no more than are sugarcane and pineapples (both scarce, especially the latter), cassava and red peppers.

The non−Dayak expressions do not necessarily imply that the legend is Malay. The one circumstance that might lend colour to this belief is that in this legend, as well as in the preceding (Semang), both of which were told me by the same man, the beauty of idle life is glorified. This seems to be more a Malay than a Dayak quality. I was not long enough among the Long−Glats to be able to decide on this point. Circumstances favour a non−Malay origin. My informant, the kapala of Long Tujo, who showed Malay influence (see Chapter XXVI), may have embellished his narrative by his acquired knowledge of things foreign. He was in reality a thorough Dayak, and he had scruples about telling me these stories. He hesitated, especially in regard to the one related, because it might injure him much to let me know that one. The Long−Glat leave−taking, described, is called *ngebaw* (to smell) *laung* (nose).

19. THE ORANG−UTAN AND THE DAYAK

(From the Ot−Danums; kampong Gunong Porok, Upper Kahayan River)

There was a man who, in grief and sorrow over the death of his wife, his children, and others, left his house and went far into the utan. Feeling tired he lay down to rest under a great lanan tree. While he slept a female orang−utan, which had its nest in the same tree and had been away hunting for food, came home, lifted the man in her arms, and carried him to her nest high up in the branches. When he awoke it seemed impossible for him to climb down, so he remained there. Each day she brought him fruit of various kinds, also occasionally boiled rice, stolen from the houses of the ladangs. After a few days she began to take liberties with him. At first the man declined her advances and she became angry, showing her teeth and nails. Finally she bit him in the shoulder, and then he surrendered. The man remained in the tree over a year. Although anxious to escape he feared the revenge of the orang−utan too much to make the attempt. In due time a male child was born who was human, but covered with long hair.

One day when she was absent seeking food he saw a sailing ship approach the coast and put out a boat for hauling water from the river near by. Hastily stringing his garments together he began the descent, but the rope was not long enough; however, by letting himself drop part of the distance he succeeded in getting down, and went away in the boat. Not finding him at home the orang−utan tried to swim to the ship, but the distance was too great. She then ascended the tree, and, in full view of the ship as it sailed away, she lifted the child and tore it in twain.

NOTE.—The Dayaks insist that this animal can swim, and my informant, a trustworthy Kahayan, said he had

seen it. The orang−utan spends most of his time in the trees, seldom descending to the ground. That the one in this case is assumed to follow the daily habit of the Dayak is in accordance with the spirit of folk−lore.

20. BRANAK, THE ANTOH

(From the Ot−Danums, of the Upper Kahayan River)

A man called Mai Boang (father of Boang) had a very good−looking son who owned a fine big male dog, and when the child grew to be old enough he used the animal for hunting. One day when the dog was following the tracks of a deer he came into a long, long cave and Boang followed. To pass through the cave consumed thrice the time required to cook rice. Emerging on the other side the dog and the boy arrived at a house where there was a handsome woman. As darkness was falling he asked if he might stay over night, and she gave permission, the dog remaining under the house. Each was attracted by the other, so they passed the night together. Boang remained there, and in time she bore him a son. She possessed a female dog, and the two dogs had two male and two female pups.

Two or three years later Boang wanted to see his father and mother. She said: “I will go with you for a short time.” With wife and child he went away, but he soon had to return because she did not like his country, of which the language and everything else was different. They came back, lived long, and had many children. Her name was Kamkamiak and she had long, long nails. When he was disinclined to comply with her wishes she forced him by using her nails on a tender spot. She shows herself to−day as alang, the black hawk.

The descendants of this pair are also Kamkamiak, evil antohs of women at childbirth. The offspring of the dogs is another kind of antoh, called Penyakit (sickness). One of these appears in the form of a large goat which is seen only occasionally. It bites in the neck and the throat, the wounds are invisible, and the victim must die on the second or third day.

When the descendants of Mai Boang are ill they become better when relating the story of Boang.

NOTE.—The handsome woman who figures in this story is an evil antoh which afflicts women at childbirth and by the Ot−Danums and others is called Kamkamiak, the one with the long nails. She is also commonly known by the name Branak. She causes the woman to lose much blood and to have pain in the uterus, the nails of the antoh playing an important part in these conditions. Men who work in the utan gathering rubber, rattan, etc., are liable to get a disorder under the scrotum that looks like scratches, and which ulcerate and may be troublesome for several months or a year. These are ascribed to the long nails of the antoh, Branak, and sacrifices of sugar and eggs are offered.

Pontianak, the well−known town in the Western Division of Dutch Borneo, is the name of another good−looking female antoh, who causes injury to women at childbirth.

Some evil antohs, by Kahayans and others called kuyang, also select maternity victims. They are believed to fly through the air at night, appearing like fireflies, and enter the woman through head, neck, or stomach, doing much harm. They are supposed to suck blood, and when a woman dies at childbirth from bleeding, the belief is that it was caused by these evil spirits that in the daytime appear as ordinary human beings. They are also able to suck blood from men and kill them. The goat is at times an antoh, as is also the case with the water−buffalo, which may appear in dreams and cause illness.

The period of time required for “cooking rice” mentioned in the tale is called one pemasak, equal to about half an hour.

21. THE PATIN FISH

(From the Katingans; kampong Talinka)

A Dayak went fishing and caught a patin which he took home in his prahu. He left the fish there and advised his wife, who went to fetch it. Upon approach she heard the crying of an infant, the fish having changed into a child, and she took it up, brought it home, gave it to eat and drink, and clothed it. The little one proved to be a girl who grew to womanhood, married, and had children. She said to her husband: “As long as we are married you must never eat patin.”

After a time the husband saw another man catch a patin, and feeling an irresistible desire to eat the fat, delicious−looking fish, he was presented with a portion which he took to his house and cooked. Seeing this, his wife for the second time said: “Why do you eat patin? You do not like me.” “I must have this,” he said, and he ate, and also gave it to his children to eat. “I am not human,” she said, “I am patin, and now I will return to the water. But mind this: If you or your descendants ever eat patin you will be ill.” And she went down to the river

and became fish again. Since that time her descendants do not eat patin, even when they accept Islam. Some have dared to break the rule, and they have become ill with fever and diarrhoea, accompanied by eruptions, abscesses, and open sores on the arms and legs. The remedy is to burn the bones of the fish and waft the smoke over the patient. For internal use the bones pulverised and mixed with water are taken.

NOTE.—This fish, by the Dutch called meerval, is said to be about a metre long, and though eaten with impunity by some, its flesh is evidently poisonous, and, according to reports, if taken will cause the flesh to fall from the bones. In accordance with a custom apparently universal among Dayaks, of leaving quarry for the women to bring home, the patin when caught is usually left at the landing float to be disposed of by the wife of the fisherman.

The Kiai Laman, a Kahayan, and a Mohammedan, who related the story, does not eat this fish, nor water turtle. Mr. B. Brouers, of Bandjermasin, whose mother was a Dayak noble from the Lower Kahayan, was instructed by her never to eat turtle. He, being a Dutchman, disregards this and nothing has ever happened, as he said, but he added that an acquaintance who did likewise lost the skin of his finger−tips.

22. THE STORY OF THE BIRD PUNAI

(From the Kahayans of Kuala Kapuas)

Long, long ago a man was catching punai with sticks to which glue had been applied. One was caught under the wing and fell to the ground. As he went to take it up it flew away a short distance. This happened several times, but at last he seized it, when suddenly it changed to a woman. He brought her to his house and said he wanted to make her his wife. “You may,” she replied, “but you must never eat punai.” This story happened in ancient times when many antohs were able to change into human beings.

The woman bore him many children. One day, when in a friend's house, people were eating punai, and he also ate some of it. His wife learned this and said to him: “I hear that you have eaten punai. You don't like me. I shall become a bird again.” Since then her descendants have never eaten this bird, because they know that their great, great, great grandmother was a punai.

NOTE.—The punai is a light−green pigeon. Mata Punai (the eye of punai) is one of the most common decorative designs of many Dayak tribes.

23. RETRIBUTION

In the beginning there were mountain−tops and sea between them. Gradually the sea subsided and the land appeared. A man and a woman living on such a mountain−top had a son. One day a typhoon lifted him in the air and carried him off to Java, where he arrived in the house of a rich Javanese. This was long before the Hindu kingdom of Modjopahit. In this house he remained many years, and showed much intelligence and industry in his work, which was to cut wood, fish, look after the poultry, and clean the rooms. It was not necessary to give him orders, for he understood everything at a glance. By and by he became a trader, assisting his patron. Finally he married the rich man's only daughter, and after living happily a long time he remembered his parents, whom he had left in Borneo, desired to visit them, and asked his wife to accompany him.

They went in two ships, and, after sailing a month or more, came to a mountain, for there was no river then. When the ships arrived, prahus came out to ask their errand. “I am looking for my father and mother whom I left long ago,” said the owner. They told him that his father was dead, but that his mother still lived, though very old.

The people went and told her that her son had come to see her. She was very poor, for children there were none, and her husband was dead. Wearing old garments, and in a dilapidated prahu, she went out to the ships, where she made known that she wanted to see her anak (child). The sailors informed the captain that his mother was there, and he went to meet her, and behold! an old woman with white hair and soiled, torn clothing. “No!” he said, “she cannot be my mother, who was beautiful and strong.” “I am truly your mother,” she replied, but he refused to recognise her, and he took a pole (by which the prahus are poled) and drove her off.

She wept and said: “As I am your mother, and have borne you, I wish that your wife, your ships, and all your men may change into stone.” The sky became dark, and thunder, lightning, and storm prevailed. The ships, the men, and the implements, everything, changed into stone, which today may be seen in these caves.

NOTE.—In the neighbourhood of Kandangan, a small town northward from Bandjermasin, are two mountains, one called gunong batu laki: the mountain of the stone man, the other gunong batu bini: the mountain of the stone wife. They contain large caves with stalactite formations which resemble human beings, ships, chairs, etc. The natives here visualise a drama enacted in the long gone−by, as related.

The Ex−Sultan of Pasir, a Malay then interned by the government in Bandjermasin, who was present when this story was told to me by a Mohammedan Kahayan, maintained that it is Dayak and said that it is also known in Pasir (on the east coast). Although the fact that the scene is laid in a region at present strongly Malay does not necessarily give a clew to the origin of the tale, still its contents are not such as to favour a Dayak source.

CONCLUSION

In closing this account of my investigations in Borneo it seems appropriate to comment briefly regarding the capabilities and future prospects of the tribes in Dutch Borneo comprised under the popular term Dayaks. We have seen that these natives are still inclined to the revolting habit of taking heads. In their dastardly attacks to accomplish this purpose, though moved by religious fanaticism, they show little courage. On the other hand they exhibit traits of character of which a civilised community might well be proud.

They are honest, trustworthy, and hospitable. In their kampongs a lonely stranger is safe from molestation and a white man travelling with them is far safer than with the Malays. They are able woodcraftsmen, and strikingly artistic, even their firewood being arranged in orderly fashion, pleasing to the eye. Should criticism arise regarding the unrestricted relations permitted in these tribes before marriage, owing to the fact that primitive conditions survive which are disapproved in civilised society, to their credit it must be admitted that conjugal relations are all that could be desired. A Dayak does not strike his wife, as Malays may do, and in business matters he takes her advice. During my travels I never heard of but one instance of infidelity. If such cases occur they are punished in some tribes with extreme severity.

In certain ways the Dayaks show more aptitude than either Malays or Javanese. To illustrate—the young men of the latter races whom I employed as “boys” on various occasions, and the Javanese soldiers who accompanied me, were satisfactory on the whole, but when several work together, each one is afraid he will do more than his share. Neither of them can tie knots that are at once firm and readily undone, nor are they able to drive a nail properly, put in screws, or rope a box, although no doubt in time they could learn; but the Dayaks are uniformly handy at such work. A well−known characteristic of the “inlander,” which he possesses in common with some classes in other races, is that if he receives his due, no more and no less, he accepts the payment without question, but if a gratuity is added he will invariably ask for more. The Dayaks are much easier to deal with in that regard and more businesslike.

Needless to state neither Javanese nor Malays are stupid. They learn quickly to do efficient routine work in office or shop, but when something new demands attention they are at a loss and appear awkward. Their intelligence, especially as regards the Javanese, is sometimes beyond the ordinary. Dr. J.C. Koningsberger, who at the time was director of the Botanic Garden at Buitenzorg, Java, told me that an “inlander” once applied to him for a position. He was able to read a little, but the doctor said: “I cannot employ you because you cannot write.” A week later he returned and demonstrated that he had mastered the obstacle, having been taught by a friend in the evenings by lamplight. When clever, the Javanese are very clever.

The different tribes of Dayaks known to me are also quick of perception, intelligent, and, though varying in mental ability, some of them, as the Kahayans and the Duhoi, undoubtedly are capable of considerable attainment if given the opportunity. The Dutch missionary in Kasungan told me of a sixteen−year−old youth, a Duhoi, who was very ambitious to learn to read. Although he did not know the letters to start with, the missionary assured me that in two hours he was able to read short sentences.

It was always a pleasure to meet the unsophisticated Dayaks, and on leaving them I invariably felt a desire to return some day. What the future has in store for them is not difficult to predict, as the type is less persistent than the other with which it has to compete in this great island domain. Ultimately these natives, who on the whole are attractive, will be absorbed by the Malays; the latter, being naturally of roving disposition, travel much among the Dayaks, marry their women, and acquire their lands. The Malay trader takes his prahus incredibly far up the rivers. No place is so remote that beads, mirrors, cotton cloth, bright bandannas, sarongs for women, “made in Germany,” etc., do not reach the aborigines, often giving them a Malay exterior, however primitive they may be in reality. The trader often remains away a year, marries a woman whom he brings back, and the children become Malays. In its assumed superiority the encroaching race is not unlike the common run of Mexicans who insidiously use the confiding Indians to advance their own interests. As Mohammedans, the aggressors feel contempt for the pork−eating natives, many of whom gradually give up this habit to attain what they consider a

higher social status, at the same time adopting a new way of living, and eventually disappear.

In this manner a change is slowly but surely being wrought in the Dayaks, who regard the Malays as superior and are influenced accordingly; but the influence is not beneficial. Malays have been known to incite them to head−hunting, using them as tools for their own ends, and when entering upon one of their frequent revolutions always manage to enlist the support of Dayaks whom they have deceived by promises. The late comers have already occupied most of the main courses of the great rivers, and are constantly pressing the rightful owners back into the interior.

The Dutch officials, be it said to their credit, are helping the latter against the intruders, and at times the government has limited the activities of the Malays on some rivers. But it is difficult, and apparently impossible, to stop a process of absorption that began centuries ago. The ultimate extinction of the Dayak is inevitable because the Malay is not only stronger, but has the additional advantage of being more prolific.

SUPPLEMENTARY NOTES TO THE TRIBES IN DUTCH BORNEO VISITED BY THE AUTHOR

KAYANS

The Kayans of Dutch Borneo are not numerous. Outside of Long Blu on the Mahakam they are found chiefly on the Kayan River in the large district of the northeast called Bulungan. They occupy the lower course, reaching not quite to Long Pangian, though having settlements there. Three subtribes are known to exist here, Oma−Gaai, Oma−Laran, and Oma−Hiban. The first named, also called Segai, live in Kaburau, Bruen, and Long Pangian. They appear somewhat different from the rest in language, and they abstain from rusa (deer) as food, while the others eat it. They file off ten teeth in the upper front jaw. At the headwaters of the Kayan River in Apo Kayan lives a subtribe, Oma−Lakan, said to number about 400; these do not file the front teeth. In Chapter IX is described a recent head−hunting raid by the Kenyahs on these Kayans.

KENYAHS

The Kenyahs are found only within the Bulungan district on the Kayan River. They are settled principally at the headwaters in Apo Kayan and at the sources of a northern tributary, the Bahau, in Podjungan. In these two regions it is estimated that they number altogether about 25,000. Down the river they have a few kampongs below Long Pangian, in the same vicinity; west of it are a few more, as mentioned in the description of my journey. On attempting to ascend the river further one would soon reach a vast extent of country entirely uninhabited except around the headwaters. The Bahau, too, is inhabited only at its source, and both rivers pass through wild, picturesque regions.

On that portion of the Kayan called Brem−Brem the river presents a formidable array of kihams which defeated the government's attempt to establish communication between Apo Kayan and the debouchure of the river. This was desirable for the sake of provisioning the garrison. An officer of the Dutch army in Borneo told me that from military reports and the testimony of Kenyahs he estimated that the Brem−Brem is a continuous stretch of kihams for thirty kilometres. The Kenyahs had told him that they walked two days and he thought that for four kilometres the river ran underground. These difficult conditions compel the Kenyahs to take another route in their travels to Tandjong Selor, marching over the watershed to the Bahau River, where they make new prahus and then continue the journey.

I give a list of subtribes with reserve:

Oma−Bakkah, Oma−Lisan, Oma−Kulit, Oma−Lim, Oma−Puah, Oma−Yalan, Oma−Tokkung, Oma−Bakkung, Oma−Bam, Oma−Lung, Oma−Badang, Lepo−Tepo, Lepo−Tao, Lepo−Maot, Lepo−Ke Anda Pah, Lepo−Ke Ang Lung, Lepo−Ke Oma−Lasang. Most of the Lepo are on the Bahau. My informant, who had travelled in the interior, said there was little difference in the languages of these subtribes.

The Kenyahs, a few Kayans, and the Katingans mutilate the membrum virile by transpiercing the glans and the urethra, and a piece of brass wire is inserted. A Kenyah tribe (Oma−Badang) in Podjungan, makes two perforations so directed that the wires are crossed.

The kapala of the Penihing kampong Long Kai, on the Mahakam, told me that Kayan and Kenyah are the same people. He probably knew the Kayans only by personal experience, but his opinion is curious in view of the fact that the two tribes have been bracketed by Dr. A.C. Haddon and Dr. J.H.F. Kohlbrugge.

MURUNGS

(Notes from kampong Tumbang Marowei, on the Laong, a tributary to the Barito River, in Central Borneo)

At the time of childbirth two to four women and one blian attend the prospective mother, who assumes a recumbent position with the upper portion of the body slightly raised. The blian blows upon a cupful of water which the woman drinks in order to make delivery easy. The umbilical cord is cut with a knife or a sharp piece of ironwood, and the afterbirth is buried. Death in labor is not unknown, and twins are born occasionally. The mother is confined for a week, and she is forbidden to eat pork, eggs, new rice, cocoanut oil, or any acid substance. She may partake of ordinary rice, lombok (red pepper), as well as sugar, and all kinds of fruit except bananas. She bathes three times a day, as is her usual custom. In one week, as soon as the navel is healed, two or three fowls are killed, or a pig, and a small feast is held at which rice brandy is served. The child is suckled for one year.

No name is given the infant until it can eat rice, which is about five months after birth. At the age of six years, or when it begins to take part in the work of the paddi fields, fishing, etc., the name is changed. In both cases the father gives the name. The kapala, my informant, changed his name a third time about ten years previously, when he entered the service of the government. Names are altered for the purpose of misleading evil spirits.

Children were few here, one reason being that abortion is a common practice, as is instanced in the case of the kapala's wife who prided herself on her success in this regard on ten occasions. Massage as well as abortifacient herbs are employed for the purpose. The root of a plant in general use is soaked in water before administering. I was also shown a vine which was about two centimetres in diameter and was told that if a portion of this was cut off and the end inserted into a pint bottle the vine would yield sufficient juice to fill it in a night. In case children are not wanted both husband and wife drink of this liquid after the morning meal, and both abstain from water for the remainder of the day. It is believed that afterward it would be possible for the man to have offspring only by marrying a new wife. There are also several specifics to prevent conception, but none for producing fertility. The kapala gave as reasons for this practice scarcity of food and woman's fear of dying. Both seem incongruous to fact and primitive ideas, and perhaps his view would better be accepted only as an indication of his ignorance in the matter. The young people are taught to dance by the blian before they are married, and take lessons for a year or two.

The Murung blian possesses three small wooden statues of human beings which he employs in recovering brua (souls) and bringing them back to persons who are ill, thus making them well. These images are called jurong, two being males, the other female, and carrying a child on its back. While performing his rites over either sex the blian holds the female jurong in his right hand, the other two being inserted under his girdle, one in front, the other at the back, to protect him against his enemies. In the case of a child being ill its brua is brought back by means of the infant carved on the back of the effigy. Undoubtedly the images are similar in character to the kapatongs I have described as occupying an important place in the lives of the Duhoi (Ot−Danum), the Katingan, and other tribes of Southwestern Borneo.

PENYAHBONGS

(Notes from the Upper Busang River, Central Borneo)

The Dutch officials give this tribe the name of Punan−Penyahbongs; the Malays call them Punans, seldom Penyahbongs. The Saputans, a neighbouring tribe, told me that the Penyahbongs and the Punans make themselves mutually understood. Whether they really are Punans or have been called so because of their recent nomadic habits is difficult to determine. However, since they declare themselves to be Punans, in view of all related circumstances it is safe to conclude that they are allied to that great nomadic tribe.

According to the Penihing chief in Long Kai the name Penyahbong was applied formerly not only to the people, but also to the mountain range in which they were living, the Muller mountains, around the headwaters of the Kapuas River in the Western Division. The western sides of the Muller mountains seem to have been their headquarters, and most of them still live west of the mountains. To one of the tributaries of this river the tribe owes the name by which they are known among Punans, Saputans, and Bukats, who call the Penyahbongs simply Kreho.

They are not numerous and so far as my information goes they are limited to a few hundred. Gompul, the most reliable of my Malays in that region, and one of the first to arrive in those parts, told me that his mother had been captured by the Penyahbongs and kept by them for thirty−five years, until her death. According to his estimate there were over two hundred of them in the Muller mountains, and they had killed many Malays, taking their heads. Three chiefs were famous for being very tall.

Fishing with tuba is known to them, also to the nomadic Punans and Bukats, Saputans, and Penihings. The Penyahbongs believe they were placed in this world by an antoh. Omens are taken from nine birds and from dreams. When a house is finished there are two or three hours' dancing in the night by men and women, one man playing the sapi (native guitar).

The child is born outside of the house. One or two women stand by to take it, wrapped in cloth, into the dwelling, where for three days it remains unbathed. Although death at childbirth is known to occur, usually within fifteen minutes the mother rises and repairs to the house. The umbilical cord is cut with a sharp bamboo and the afterbirth is not taken care of, dogs generally being permitted to eat it. When the child can walk the father and mother give it a name. No abortion is practised, there are no puberty ceremonies, and sexual intercourse is not practised during menstruation.

SAPUTANS

(Notes from the Kasao River, a tributary to the Upper Mahakam)

The name Saputan is derived from the word sahput, sumpitan (the blow−pipe), and probably means, “those who have sumpitan.” In the upper part of the Kasao River is a big back current called Saputan and the people who originally lived at the headwaters have the same name as the current. At first they were roaming in the mountains, though not conflicting with the Penyahbongs, and later settled in four kampongs which, beginning with the uppermost, at the time of my visit were: 1. Pomosing (mouse) at a tributary of the same name. 2. Data Laong (land of durian). 3. Ong Sangi (ong = river). 4. Nomorunge (a common, small, black and white bird) on a tributary of the same name; with hardly a hundred full−grown persons, this is the largest. Formerly the office of the chief, tjupi, was hereditary. When he became old he was succeeded by his son.

The woman bears her child in the house, surrounded by women, her husband, and another man. She assumes a lying position and is helped by being frequently lifted up, and by stroking. The abdomen is rubbed with a certain medicinal herb, first having been heated over the fire, to facilitate the expulsion of the afterbirth, which later is hung in a tree. Having tied a vine round the umbilical cord near the abdomen they cut the cord with a sharp piece of bamboo. The assisting women wash the baby as well as the mother.

For two days after childbirth she does no work, and for some time she must not eat the fat of pig or fish. In case of twins being born, they are welcome if the sex is the same, but if one is male and the other female, one is given away, the father exercising his preference. Two months after birth a name is given by the father. Should the mother die, no other woman willingly suckles the child unless the father has a daughter who can do it. However, by paying from one to three gongs a woman may be induced to undertake the duty.

ORANG BAHAU

(On the Mahakam River)

Bahau is the name of a river in Apo Kayan, where the tribes of the Mahakam River lived before they migrated to their present habitations, a hundred and fifty to two hundred years ago. The Penihings, Kayans, Oma−Sulings, and Long−Glats speak of themselves as Orang Bahau, as also do the Saputans, though probably they did not originally come from Apo Kayan. According to these Dayaks the designation as used by the Malays signifies people who wear only chavat (loin cloth), and the Punans and Ibans are said to be included under the same term.

PUNANS AND BUKATS

(Notes from kampong Long Kai on the Mahakam River)

The formidable king cobra (*naia bungarus*) is feared by the Punans, who have no remedy for the bite of this or any other venomous snake. The Bukats are said to know a cure which they share with the Penihings; the bark is scraped from a certain tree and the juice is applied to the wound. Death from lightning is unknown to any of these three tribes.

The Punans apparently do not attribute disease to the adverse influence of an antoh, although their remedy is the same, consisting of singing in the night and removing small stones from the abdomen or other parts that may be affected.

The Bukats whom I met were beautifully tatued. The kapala whom I saw at Long Kai had the mark of a ripe durian on each shoulder in front and an immature one above each nipple. On the lower part of the upper arm was a tatu of an edible root, in Penihing called rayong. Over the back of his right hand, toward the knuckles, he had a zigzag mark representing the excrescences of the durian fruit. In regard to the presence of spirits, number of souls, blians, disease, and its cure, restrictions for pregnant women, the child's cradle—the ideas of the Bukats are

identical with those of the Penihings, and possibly are derived from them.

PENIHINGS

(Notes from the Mahakam River)

The Penihings get their supply of ipoh, the poison for the sumpitan darts, from Punans who live at the sources of the rivers of the Western Division. According to native report the trees which furnish the juice do not grow along the Mahakam and the nearest country where they are found is to the south of Tamaloe. As is the case with the Punans and Bukats, cutting the teeth is optional.

Restrictions imposed during pregnancy do not differ from those of other tribes described. At childbirth no man is permitted to be present. For three days the mother eats boiled rice, red pepper, and barks of certain trees, and she may work on the third day. Twins are known to occur. As soon as the navel is healed a name is given to the child. Both Penihing and Saputan, if asked, are allowed to give their own names. Marriages are contracted while the woman is still a child. There are no marriage ceremonies and divorces are easily obtained. If a married woman is at fault with another man the two must pay the injured husband one gong, as well as one gong for each child. In case the husband is at fault, the same payment is exacted by the injured wife.

The Penihings have a game called ot−tjin which I also observed in other Bornean tribes, and which to some extent is practised by the Malays. This game, generally known among scientific men by the name mancala, is of the widest distribution. Every country that the Arabs have touched has it, and it is found practically in every African tribe. It is very common in the coffee houses of Jerusalem and Damascus. A comprehensive account of the game mancala is given by Mr. Stewart Culin, the eminent authority on games, in the Report of the U.S. National Museum for 1894, pages 595−607.

With the Penihings the complete name is aw−li on−nam ot−tjin, meaning: playon−nam fish. An essential of the game is an oblong block of heavy wood which on its upper surface is provided with two rows of shallow holes, ten in each row, also a larger one at each end. The implement is called tu−tung ot−tjin, as is also both of the large single holes at the ends. There are two players who sit opposite each other, each controlling ten holes. The stake may be ten or twenty wristlets, or perhaps a fowl, or the black rings that are tied about the upper part of the calf of the leg, but not money, because usually there is none about. The game is played in the evenings.

Two, three, four, or five stones of a small fruit may be put in each hole; I noticed they generally had three; pebbles may be used instead. Let us suppose two have been placed in each hole; the first player takes up two from any hole on his side. He then deposits one in the hole next following. Thus we have three in each of these two holes. He takes all three from the last hole and deposits one in each of the next three holes; from the last hole he again takes all three, depositing one in each of the next three holes. His endeavour is to get two stones in a hole and thus make a “fish.” He proceeds until he reaches an empty hole, when a situation has arisen which is called gok—that is to say, he must stop, leaving his stone there.

His adversary now begins on his side wherever he likes, proceeding in the same way, from right to left, until he reaches an empty hole, which makes him gok, and he has to stop.

[Illustration: THE GAME MANCALA AS USED BY THE PENIHINGS.]

To bring together two stones in one hole makes a “fish,” but if three stones were originally placed in each hole, then three make a “fish”; if four were originally placed, then four make a “fish,” etc., up to five. The player deposits the “fish” he gains to the right in the single hole at the end.

The two men proceed alternately in this manner, trying to make “fish” (ara ot−tjin). The player is stopped in his quest by an empty hole; there he deposits his last stone and his adversary begins. During the process of taking up and laying down the stones no hole is omitted; in some of them the stones will accumulate. On the occasion of the game described I saw two with eight in them.

When one of the players has no stones left in his holes he has lost. If stones are left on either side, but not enough to proceed, then there is an impasse, and the game must be played over again.

OMA−SULINGS

(On the Mahakam River)

To marry the daughter of a noble the man must pay her father twenty to thirty gongs (each costing twenty to forty florins). The price of the daughter of a pangawa is from one to three gongs, and to obtain a wife from the family of a pangin costs a parang, a knife, or some beads. Women assist at childbirth, which takes place within the room, near the door, but generally no blian is present.

When a girl has her first menstruation a hen or a pig is killed, and in the evening the blood thus obtained is applied to the inside of a folded leaf which the blian wafts down her arms—"throwing away illness," the meat of the sacrifice being eaten as usual. The same treatment is bestowed upon any one who desires good health.

As many infants die, it is the custom to wait eight or ten days after birth before naming a child, when a similar sacrifice is made, and a leaf prepared in like manner is passed down the arms of the infant by the blian. In selecting a name he resorts to an omen, cutting two pieces of a banana leaf into the shape of smaller leaves. According to the way these fall to the ground the matter is decided. If after two trials the same result is obtained the proposed name is considered appropriate. Also on the occasion of marriage, a similar sacrifice and the same curative practice are used.

When couples tire of each other they do not quarrel. The husband seeks another wife and she another husband, the children remaining with the mother. The sacred numbers of the Oma−Sulings are four, eight, and sixteen. Contact with a woman's garment is believed to make a man weak, therefore is avoided.

The interpretation of designs in basketwork, etc., is identical with the Oma−Sulings and the Penihings, though the women of the last−named tribe are better informed on the subject.

The antoh usually recognised by the name nagah, is called aso (dog) lidjau by the Oma−Sulings and Long−Glats, while among the Penihings and Punans it is known as tjingiru, but nagah is the name used also in Southern Borneo, where I frequently noticed it in designs. On the Mahakam few are the Oma−Suling and Long−Glat houses which are not decorated with an artistic representation of this antoh. Among the Penihings in Long Tjehan I never saw a sword hilt carved with any other motif. On the knife−handle it is also very popular.

There are three modes of disposing of the dead: by burying in the ground a metre deep; by depositing the coffin in a cave, or by making a house, called bila, inside of which the coffin is placed. A raja is disposed of according to either the second or third method, but the ordinary people of the kampong are placed in the ground.

LONG−GLATS

(Notes from Long Tujo, Mahakam River)

Before they emigrated from Apo Kayan the name of the Long−Glats was Hu−van−ke−raw. Attached to Long Tujo is a small kampong occupied by the Oma−Tapi, who speak a different language, and almost opposite, scarcely a kilometre down the river, is another inhabited by the Oma−Lokvi, who speak a dialect other than Long−Glat. Not far west of here is a kampong, Nahamerang, where the Bato−Pola live, said to be Kayan. The Long−Glats appear to be powerful, but their measurements are very irregular. They seem darker in colour than the other Bahau people, most of them showing twenty−six on the von Luschan colour scale.

Pregnant women and their husbands are subject to restrictions similar to those already described in regard to other tribes. In addition may be mentioned that they must not eat two bananas that have grown together, nor sugar−cane which the wind has blown to the ground, nor rice if it has boiled over the kettle, nor fish which in being caught has fallen to the ground or in the boat. The afterbirth drops through the floor and is eaten by dogs or pigs. The still−born child is wrapped in a mat and placed in a hollow tree. The mother may work in five days. Two to four weeks elapse before the child is named by the blian and this ceremony is accompanied by the sacrifice of a pig. In cases of divorce the children may follow either parent according to agreement.

The coffin is a log hollowed out, and provided with a cover. At one end is carved the head of Panli, an antoh, and at the other his tail. Many vestments are put on the corpse, and for a man a parang is placed by his side within the coffin. The house is then made and the coffin placed inside.

DUHOI (Ot−Danums)

(Notes from the Samba River, Southwestern Borneo)

The new−born child is washed with water of that which is brought to the mother, and the afterbirth is thrown into the river. Most of the women, after bearing a child in the morning, walk about in the afternoon, though some have to wait a few days. Their food for some time is rice and fish, abstaining from salt, lombok (red pepper), fat, acid, and bitter food, also meat.

Seven days after birth the child is taken to the river to be bathed. On its return blood from a fowl or, if people are well to do, from a pig that has been sacrificed, is smeared on its forehead and chest, and a name is given. The presence of the blian not being required, the parents give the name, which is taken from a plant, tree, flower, animal, or fish. A wristlet is placed around each wrist and the name is not changed later in life. There are no puberty nor menstruation ceremonies. No sexual intercourse is permissible while a woman is pregnant, nor during

menstruation, nor during the first three months after childbirth. Cousins may marry.

Evidence of polyandry is found among the Duhoi. Eight years previous to my visit on the river Braui lived for six years a woman blian about thirty years old, who had three young husbands. She practised her profession and the husbands gathered rattan and rubber. She was known to have had thirty−three husbands, keeping a man a couple of weeks, or as many months, then taking others. She had no children.

A design representing the flying prahu, described in Chapter XXXI, is also occasionally seen in Kahayan mats, the idea being that it may be of assistance to some beneficent antoh. In this connection it is of interest to note how the Kahayans use the flying prahu as a feature of the great tiwah festival. Drawings of the craft are made in colours on boards which are placed in the house of ceremonies, and are intended to serve as a conveyance for the liao. Such drawings are also presented to the good antoh, Sangiang, as a reward for his assistance in making the feast successful, thus enabling him to fly home.

UPPER AND LOWER KATINGANS

(Southwestern Borneo)

Of the Dayaks living about the headwaters of the Katingan River Controleur Michielsen, in his report quoted before, says: “I cannot omit here to mention that the Dayaks of these regions in language and habits show the closest agreement with the Alfurs in Central Celebes, whom I visited in 1869, and that most of the words of the Alfur language (which I at once understood because it resembles the low Java language) also here in the Dayak language were observed by me. This circumstance affords convincing testimony in favour of the early existence of a Polynesian language stock and for a common origin of the oldest inhabitants of the archipelago.”

There appears to be much similarity in regulations regarding marriage, birth, death, and other adats as observed by the Katingans, Duhoi, and Mehalats. The latter, who live on the Senamang, a tributary to the Katingan River near its headwater, may be a Duhoi subtribe, but very little is known about them; the custom of drinking tuak from human skulls is credited to them, and they are looked upon with contempt by the Katingans for eating dogs.

With the Katingans it is the custom for the blian to deposit in a cup containing uncooked rice the objects withdrawn from a patient. Having danced and spoken to the cereal he throws it away and with it the articles, the rice advising the antoh that the small stones, or whatever was eliminated, which he placed in the patient, are now returned to him.

These Katingans begin their year in June and July, when they cut the jungle in order to make ladangs, months being designated by numbers. At the beginning of the year all the families sacrifice fowls, eat the meat, and give the blood to antoh in accordance with their custom. After the harvest there is a similar function at which the same kind of dancing is performed as at the tiwah feast. On both occasions a game is engaged in which also is found among the Bahau and other tribes, wherein a woman jumps dexterously between heavy pestles that, held horizontally, are lifted up and brought down in rapid succession. Three months later—at the end of the year—another festival occurs.

The Katingan calendar may be rendered thus:

1. Cutting the jungle, June and July..... during 2 months
2. Drying the trees and burning them..... during 1 month
3. Planting paddi..... during 2 months
4. New paddi..... in 3 months
5. Harvesting..... during 1 or 2 months
6. Waiting..... during 3 months

In order to ascertain the auspicious date for planting paddi these Dayaks employ an astronomical device founded on the obvious fact that in their country there comes a period when a rod placed in an upright position casts no shadow. That is the time for planting. In addition to this method of determination they consult a constellation of three stars which “rise” in the east and “set” in the west during half a year, and are invisible during the following six months. When the three stars appear perpendicularly above the rod in the early morning, before sunrise, then the time to plant is at hand; when they are in the zenith in the late afternoon before sunset, the season for making ladang has come.

For these observations, however, a single rod is not used, but an arrangement of rods called togallan, seven in number, which are planted in the ground, the middle one upright, the rest diverging on either side like a fan.

Beginning on the left side, six months are indicated, but the togallan does not remain standing more than three; in fact as soon as the planting is finished it is removed. Although the most propitious time is when the sun is at zenith, it is also considered favourable for half the distance from the middle rod toward 3 and toward 5. If paddi is planted in the second month the crop will be injured; if in the fifth month, the plant will be damaged.

[Illustration: INDICATION BY THE TOGALLAN OF THE FAVORABLE TIME FOR PLANTING RICE.]

Formerly heavy spears made of ironwood were employed not only as weapons, but for agricultural purposes as well, both when making the holes into which the seed grains are dropped and as material in erecting the astronomical device. Each of the seven rods is called ton−dang, as is the pointed stick with which at present the ground is prepared for planting paddi.

MISCELLANEOUS

With the Kenyahs and many other tribes it is the custom to give boiled rice that has stood overnight to the dogs, pigs, and hens; it is not considered fit for human food.

Regarding the number of souls: The Murung says that each person has seven souls, called brua, six being distributed as follows: one at the top of the head, one in each eye and knee, and one in the navel. The Duhoi (Ot−Danum) has also seven brua, one at the top of the head and one in each eye, knee, and wrist.

Other tribes speak of three souls. The Kenyahs, according to Dr. J.M. Elshout, have only one brua, located at times in the head, at times in the heart; and the tiger−cat and the orang−utan have stronger brua than man. The Katingans likewise recognise but one, called liao in life, and after death. They also give the same name to the soul of an animal, but the more common usage in the tribes is to call the ghost liao, by the Malays named njava.

In regard to the practice of incision, which is used in Southwest Borneo, Chapter XXXV, I am able to furnish some details gathered in Sampit from three Dayaks who had been operated upon. A cut is made in the praeputium lengthwise with a knife (further east a sharpened bamboo is used), a piece of iron wood being used as a support, and the operation which in Katingan is called habalak is performed by the father of the father's brother when the boy is coming of age. Before the event he must go into the river up to his navel seven days in succession, morning, midday, and evening, and stand in the water for an hour. All boys must undergo the operation, which is not sanguinary, the leaves of a tree called mentawa being applied to the wound. They could give no reason why they follow this practice any more than the ordinary Dayak can explain the purpose of tatuing.

With the Kayans, and, indeed, all the tribes I met in Dutch Borneo, it is the custom to urinate in a sitting position.

To the observer it is strikingly evident that the mammae of both Dayak and Malay women retain firmness and shape much longer than is the case with white women.

A SHORT GLOSSARY

adat, precept, regulation, religious observance.
antoh, spirit, good or evil.
atap, a shelter, consisting of a mat resting on upright saplings,
often erected in the boats on long journeys.

babi, pig.
badak, rhinoceros.
balei, a general name for a house of worship.
barang, goods, things, belongings.
blanga, large, valuable jar, usually of Chinese manufacture.
blian, priest−doctor.
bom, custom−house.
brua, soul.

chavat, loin−cloth.
company (the), the government.
cranyang, basket.

damar, resin.

gutshi, large jar.

inlander, native.
ipoh, poison for the dart of the blowpipe, also the tree from which it is secured (the upas tree).

kali, river.
kampong, native village.
kapala, chief (= pumbakal).
kidyang, a small kind of deer.
kiham, rapids.
kuala, mouth of a river.

ladang, paddi field.
laki, man, male.
lombok, red pepper.

mandau, Dayak short sword (= parang).
mandur, overseer.

nagah, fabulous animal, the apparition of a spirit.

onder, native subdistrict chief.
orang, man.

paddi, rice.
parang, Dayak short sword (= mandau).
pasang−grahan, public lodging−house.
pisau, small knife.
plandok, mouse−deer (*tragulus*).
prahu, native boat.
pumbakal, chief (= kapala).

raja, a native chief, or noble.
raja besar, big raja.
ringit, the Dutch coin of f. 2.50.
rupia, florin, guilder.
rusa, deer.

sambir, mat made from palm leaves.
sarong, a cloth wound around the loins.
sayur, vegetable stew.
sumpitan, blowpipe.

takut, timid.
ticcar, mat made from rattan.
tin, five−gallon tin can.
tingang, great hornbill.
tingeling, scaly ant−eater.
tuak, native rice brandy.
tuan, master, lord.
tuan besar, great master or lord.
tuba, root used for poisoning the water for fishing purposes.

utan, jungle, woods.

wah−wah, gibbon, a long−armed monkey.

wang, coin, money.

INDEX

[Illustration (Map): THE DUTCH INDIES AND SURROUNDING COUNTRIES]

[Illustration (Map): BORNEO (DOTTED SURFACE) AS COMPARED IN SIZE WITH THE BRITISH ISLES (WHITE) (After Wallace)]

SAMPLES OF DAYAK TATUING

The figure of a man represents a Lower Katingan, particularly a kapala at Tewang Rongkang, the only one I saw with tatu marks on the knees. These depict a fish of ancient times. On each thigh is the representation of a dog or possibly the nagah with a dog's head.

The central tatu design represents a tree, the trunk of which rises from the navel; adjoining it above are two great oval designs stretching across the chest and depicting the wings of a fowl. The tree which is called garing, is a fabulous one that cannot be killed. This same pattern may be observed on the mats of the Kayans.

Down the arms and over the shoulders are similar designs representing leaves of the areca palm.

The border around the wrist is a representation of a bird called susulit. The cross on the hand represents the beak of this bird; the starlike figure is the eye of the hornbill.

The globular tatu mark on the calf of the leg (h) is peculiar to Katingans, Ot−Danums, and other tribes. The design below, representing a certain fruit, was seen on a Katingan.

The seven tatu marks to the right (a, b, c, d, e, f, g) represent the

durian in various phases. The upper (a) to the left is a ripe durian, a design often observed in the tribes, one on each shoulder of a man. The next three (b, c, d) are young fruit, often seen one above each nipple. The next figure (e), usually observed on the upper arm (in front) represents 14 durians.

Above the nails of the tatued hand of a Penihing woman (f) are seen similar triangular marks, while across it runs a border representing the protuberances of the fruit. The latter designs are also found on the foot (g) of the same individual. The cross lines over fingers and toes represent banana leaves.

[Illustration: SAMPLES OF DAYAK TATUING:
Tatuing of Lower Katingan
a. Bukit
b. Bukit
c. Bukit
d. Saputan
e. Long−Glat
f, g. Hand and foot of Penihing woman, Durian designs
h. The globular tatu mark]