

# **Pagan Tribes of Borneo, V1**

Charles Hose and William McDougall



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The Pagan Tribes of Borneo

A Description of Their Physical Moral and Intellectual Condition  
With Some Discussion of their Ethnic Relations

## Preface

In writing this book we have aimed at presenting a clear picture of the pagan tribes of Borneo as they existed at the close of the nineteenth century. We have not attempted to embody in it the observations recorded by other writers, although we have profited by them and have been guided and aided by them in making our own observations. We have rather been content to put on record as much information as we have been able to obtain at first hand, both by direct observation of the people and of their possessions, customs, and manners, and by means of innumerable conversations with men and women of many tribes.

The reader has a right to be informed as to the nature of the opportunities we have enjoyed for collecting our material, and we therefore make the following personal statement. One of us (C. H.) has spent twenty-four years as a Civil Officer in the service of the Rajah of Sarawak; and of this time twenty-one years were spent actually in Sarawak, while periods of some months were spent from time to time in visiting neighbouring lands — Celebes, Sulu Islands, Ternate, Malay Peninsula, British North Borneo, and Dutch Borneo. Of the twenty-one years spent in Sarawak, about eighteen were passed in the Baram district, and the remainder mostly in the Rejang district. In both these districts, but especially in the Baram, settlements and representatives of nearly all the principal peoples are to be found; and the nature of his duties as Resident Magistrate necessitated a constant and intimate intercourse with all the tribes of the districts, and many long and leisurely journeys into the far interior, often into regions which had not previously been explored. Such journeys, during which the tribesmen are the magistrate's only companions for many weeks or months, and during which his nights and many of his days are spent in the houses of the people, afford unequalled opportunities for obtaining intimate knowledge of them and their ways. These opportunities have not been neglected; notes have been written, special questions followed up, photographs taken, and sketches made, throughout all this period.

In the years 1898 — 9 the second collaborator (W. McD.) spent the greater part of a year in the Baram district as a member of the Cambridge Anthropological Expedition, which, under the leadership of Dr. A. C. Haddon, went out to the Torres Straits in the year 1897. During this visit we co-operated in collecting material for a joint paper on the animal cults of Sarawak;[1] and this co-operation, having proved itself profitable, suggested to us an extension of our joint program to the form of a book embodying all the information already to hand and whatever additional information might be obtainable during the years that one of us was still to spend in Borneo. The book therefore may be said to have been begun in the year 1898 and to have been in progress since that time; but it has been put into shape only during the last few years, when we have been able to come together for the actual writing of it.

During the year 1899 Dr. A. C. Haddon spent some months in the Baram district, together with other members of the Cambridge Expedition (Drs. C. G. Seligmann, C. S. Myers, and Mr. S. Ray); and we wish to express our obligation to him for the friendly encouragement in, and stimulating example of, anthropological field work which he afforded us during that time, as well as for later encouragement and help which he has given us, especially in reading the proofs of the book and in making many helpful suggestions. We are indebted to him also for the Appendix to this book, in which he has stated and discussed the results of the extensive series of physical measurements of the natives that he made, with our assistance, during his visit to Sarawak.

We have pleasure in expressing here our thanks to several other gentlemen to whom we are indebted for help of various kinds — for permission to reproduce several photographs, to Dr. A. W. Nieuwenhuis, the intrepid explorer of the interior of Dutch Borneo, who in his two fine volumes (*QUER DURCH BORNEO*) has embodied the observations recorded during two long journeys in the interior; to Mr. H. Ling Roth for the gift of the blocks used in the preparation of his well-known work, *THE NATIVES OF SARAWAK AND BRITISH NORTH BORNEO*, many of which we have made use of; to Dr. W. H. Furness, author of *THE HOME LIFE OF BORNEO HEAD-HUNTERS* (1902), for several photographic plates made by him during his visits to the Baram in the years 1897 and 1898; to Drs. C. G. Seligmann and C. S. Myers for permission to reproduce several photographs; to Mr. R. Shelford, formerly Curator of the Sarawak Museum, for his permission to incorporate a

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large part of a paper published jointly with one of us (C. H.) on tatu in Borneo, and for measurements of Land Dayaks made by him; to Mr. R. S. Douglas, formerly Assistant Officer in the Baram district and now Resident of the Fourth Division of Sarawak, for practical help genially afforded on many occasions.

Finally, it is our agreeable duty to acknowledge our obligation to H.H. the Rajah of Sarawak, who welcomed to his country the members of the Cambridge Anthropological Expedition, and without whose enlightened encouragement of scientific work on the part of his officers this book would never have been written.

C. H.

W. McD.

JULY 1912.

## Supplementary Preface by one of the Authors

I feel that it is necessary to supplement our joint–preface with some few words of apology for, and explanation of, the appearance of my name on the title–page of this book. For the book is essentially an attempt to set forth in condensed form the mass of knowledge of the tribes of Borneo acquired by Dr. Hose in the course of a quarter of a century's intimate study of, and sympathetic companionship with, the people of the interior. My own part in its production has been merely that of a midwife, though I may perhaps claim to have helped in the washing and dressing of the infant as well as in its delivery, and even to have offered some useful advice during the long years of pregnancy. And, since it is more difficult to present a brief and popular account of any complex subject the more intimate is one's knowledge of it, I may fairly hope that my superficial acquaintance with the pagan tribes of Borneo has been a useful ally to Dr. Hose's profound and extensive knowledge of them; I have therefore gladly accepted my friend's generous invitation to place my name beside his as joint–author of this work.

W. McD.



## CHAPTER 1. Geography of Borneo

Borneo is one of the largest islands of the world. Its area is roughly 290,000 square miles, or about five times that of England and Wales. Its greatest length from north–east to south–west is 830 miles, and its greatest breadth is about 600 miles. It is crossed by the equator a little below its centre, so that about two–thirds of its area lie in the northern and one–third lies in the southern hemisphere. Although surrounded on all sides by islands of volcanic origin, Borneo differs from them in presenting but small traces of volcanic activity, and in consisting of ancient masses of igneous rock and of sedimentary strata.

The highest mountain is Kinabalu, an isolated mass of granite in the extreme north, nearly 14,000 feet in height. With this exception the principal mountains are grouped in several massive chains, which rise here and there to peaks about 10,000 feet above the sea. The principal of these chains, the Tibang–Iran range, runs south–westward through the midst of the northern half of the island and is prolonged south of the equator by the Schwaner chain. This median south–westerly trending range forms the backbone of the island. A second much–broken chain runs across the island from east to west about 1[degree] north of the equator. Besides these two principal mountain chains which determine the main features of the river–system, there are several isolated peaks of considerable height, and a minor ridge of hills runs from the centre towards the south–cast corner. With the exception of the northern extremity, which geographically as well as politically stands apart from the rest of the island, the whole of Borneo may be described as divided by the two principal mountain chains into four large watersheds. Of these, the north–western basin, the territory of Sarawak, is drained by the Rejang and Baram, as well as by numerous smaller rivers. Of the other three, which constitute Dutch Borneo, the north–eastern is drained by the Batang Kayan or Balungan river; the south–eastern by the Kotei and Banjarmasin rivers; and the south–western by the Kapuas, the largest of all the rivers, whose course from the centre of the island to its south–west corner is estimated at 700 miles. Although the point of intersection of the two principal mountain chains lies almost exactly midway between the northern and southern and the eastern and western extremities of the island, the greater width of the southern half of the island gives a longer course to the rivers of that part, in spite of the fact that all the six principal rivers mentioned above have their sources not far from this central point. The principal rivers thus radiate from a common centre, the Batang Kayan flowing east–north–east, the Kotei south–east by east, the Banjarmasin south, the Kapuas a little south of west, the Rejang west, and the Baram north–west. This radiation of the rivers from a common centre is a fact of great importance for the understanding of the ethnography of the island, since the rivers are the great highways which movements of the population chiefly follow.

In almost all parts of the island, the land adjoining the coast is a low–lying swampy belt consisting of the alluvium brought down by the many rivers from the central highlands. This belt of alluvium extends inland in many parts for fifty miles or more, and is especially extensive in the south and south–east of the island.

Between the swampy coast belt and the mountains intervenes a zone of very irregular hill country, of which the average height above the sea–level is about one thousand feet, with occasional peaks rising to five or six thousand feet or more.

There seems good reason to believe that at a comparatively recent date Borneo was continuous with the mainland of Asia, forming its south–eastern extremity. Together with Sumatra and Java it stands upon a submarine bank, which is nowhere more than one hundred fathoms below the surface, but which plunges down to a much greater depth along a line a little east of Borneo (Wallace's line). The abundance of volcanic activity in the archipelago marks it as a part of the earth's crust liable to changes of elevation, and the accumulation of volcanic matter would tend to make it an area of subsidence; while the north–east monsoon, which blows with considerable violence down the China Sea for about four months of each year, may have hastened the separation of Borneo from the mainland. That this separation was effected in a very recent geological period is shown by the presence in Borneo of many species of Asiatic mammals both large and small, notably the rhinoceros (*R. BORNIENSIS*, closely allied to *R. SUMATRANUS*); the elephant (*E. INDICUS*, which, however, may have

been imported by man); the wild cattle (*BOS SONDIACUS*, which occurs also in Sumatra); several species of deer and pig (some of which are found in Sumatra and the mainland); several species of the cat tribe, of which the tiger-cat (*FELIS NEBULOSA*) is the largest; the civet-cat (*VIVERRA*) and its congeners *HEMIGALE*, *PARADOXURUS*, and *ARCTOGALE*; the small black bear (*URSUS MALAYANUS*); the clawless otter (*LUTRA CINEREA*); the bear-cat (*ARCTICTIS BINTURONG*); the scaly ant-eater (*MANIS JAVANICUS*); the lemurs (*TARSIVUS SPECTRUM* and *NYCTICEBUS TARDIGRADUS*); the flying lemur (*GALEOPITHECUS VOLANS*); the porcupine (*HYSTRIX CRASSISPINIS*); numerous bats, squirrels, rats and mice; the big shrew (*GYMNURA*); several species of monkeys, and two of the anthropoid apes. The last are of peculiar significance, since they are incapable of crossing even narrow channels of water, and must be regarded as products of a very late stage of biological evolution. Of these two anthropoid species, the gibbon (*HYLOBATES MULLERI*) is closely allied to species found in the mainland and in Sumatra, while the *MAIAS* or orang-utan (*SIMIA SALYRUS*) is found also in Sumatra and, though not now surviving on the continent, must be regarded as related to anthropoids whose fossil remains have been discovered there.[2]

The zoological evidence thus indicates a recent separation of Borneo and Sumatra from the continent, and a still more recent separation between the two islands.

The climate of the whole island is warm and moist and very equable. The rainfall is copious at all times of the year, but is rather heavier during the prevalence of the north-east monsoon in the months from October to February, and least during the months of April and May. At Kuching, during the last thirty years, the average yearly rainfall has been 160 inches, the maximum 225, and the minimum 102 inches; the maximum monthly fall recorded was 69 inches, and the minimum .66, and the greatest rainfall recorded in one day was 15 inches. The temperature hardly, if ever, reaches 100[degree] F.; it ranges normally between 70[degree] and 90[degree] F.; the highest reading of one year (1906) at Kuching was 94[degree], the lowest 69[degree]. Snow and frost are unknown, except occasionally on the summits of the highest mountains. Thunder-storms are frequent and severe, but wind-storms are not commonly of any great violence.

The abundant rainfall maintains a copious flow of water down the many rivers at all times of the year; but the rivers are liable to rise rapidly many feet above their normal level during days of exceptionally heavy rain. In their lower reaches, where they traverse the alluvial plains and swamps, the rivers wind slowly to the sea with many great bends, and all the larger ones are navigable by small steamers for many miles above their mouths: thus a large steam launch can ascend the Rejang for 160 miles, the Baram for 120, and some of the rivers on the Dutch side for still greater distances. The limit of such navigation is set by beds of rock over which the rivers run shallow, and which mark the beginnings of the middle reaches. In these middle reaches, where the rivers wind between the feet of the hills, long stretches of deep smooth water alternate with others in which the water runs with greater violence between confining walls of rock, or spreads out in wide rapids over stony bottoms. The upper reaches of the rivers, where they descend rapidly from the slopes of the mountains, are composed of long series of shallow rapids and low waterfalls, alternating at short intervals with still pools and calm shallows, bounded by rock walls and great beds of waterworn stones, which during the frequent freshets are submerged by a boiling flood. The whole river in these upper reaches is for the most part roofed in by the overarching forest.

Practically the whole of Borneo, from the seacoast to the summits of the highest mountains, is covered with a dense forest. On the summits this consists of comparatively stunted trees, of which every part is thickly coated with moss. In all other parts the forest consists of great trees rising to a height of 150 feet, and even 200 feet, and of a dense undergrowth of younger and smaller trees, and of a great variety of creepers, palms, and ferns. Trees of many species (nearly 500) yield excellent timber, ranging from the hardest ironwood or *BILIAN*, and other hard woods (many of them so close-grained that they will not float in water), to soft, easily worked kinds. A considerable number bear edible fruits, notably the mango (from which the island derives its Malay name, *PULU KLEMANTAN*), the durian, mangosteen, rambutan, jack fruit, trap, lansat, banana of many varieties, both wild and cultivated, and numerous sour less nutritious kinds. Wild sago is abundant in some localities. Various palms supply in their unfolding leaves a cabbage-like edible. Among edible roots the caladium is the chief. Rubber is obtained as the sap of a wild creeper; gutta-percha from trees of several varieties; camphor from pockets in the stem of the camphor tree (*DRYOBALANOPS AROMATICA*). But of all the jungle plants those which play the most important parts in the life of the people are the many species of the rattan and the bamboo; without them more than half the crafts and most of the more important material possessions of the natives would be impossible,

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and their lives would perhaps nearly conform to the conventional notion of savage existence as something 'nasty, dull, and brutish.' The jungle of Borneo is, of course, famous for its wealth of orchids, and can claim the distinction of producing the largest flower of the world (RAFFLESIA), and many beautiful varieties of the pitcher plant.

The forests of Borneo harbour more than 450 species of birds, many of them being of gorgeous colouring or strange and beautiful forms; especially noteworthy are many hawks, owls, and eagles, fly-catchers, spider-hunters, sun-birds, broad-bills, nightjars, orioles, miners, pigeons, kingfishers, hornbills, trojans, magpies, jays, crows, partridges, pheasants, herons, bitterns, snipes, plovers, Curlews, and sandpipers. Amongst these are many species peculiar to Borneo; while on the mountains above the 4000-foot level are found several species which outside Borneo are known only in the Himalayas.

Besides the mammals mentioned above, Borneo claims several species of mammal peculiar to itself, notably the long-nosed monkey (NASALIS LARVATUS); two species of ape (SEMNOPITHECUS HOSEI and S. CRUCIGER); many shrews and squirrels, including several flying species; a civet-cat (HEMIGALE HOSEI); a deer (CERVUS BROOKII); the bearded pig (SUS HARBATUS); the curious feather-tailed shrew (PTYLOCERCUS LOWII).

Reptiles are well represented by the crocodile, which abounds in all the rivers, a long-snouted gavia, numerous tortoises and lizards with several flying species, and more than seventy species of snakes, of which some are poisonous, while the biggest, the python, attains a length of thirty feet. The rivers abound in edible fish of many species; insects are of course numerous and varied, and, aided by the multitude of frogs, they fill the island each evening at sunset with one vast chorus of sound.

## CHAPTER 2. History of Borneo

The Pagan tribes of Borneo have no written records of their history and only very vague traditions concerning events in the lives of their ancestors of more than five or six generations ago. But the written records of more cultured peoples of the Far East contain references to Borneo which throw some small rays of light upon the past history and present condition of its population. It has seemed to us worth while to bring together in these pages these few historical notes. The later history of Borneo, which is in the main the story of its occupation by and division between the Dutch and English, and especially the romantic history of the acquisition of the raj of Sarawak by its first English rajah, Sir James Brooke, has often been told,[3] and for this reason may be dismissed by us in a very few words.

The coasts of Borneo have long been occupied by a Mohammedan population of Malay culture; this population is partly descended from Malay and Arab immigrants, and partly from indigenous individuals and communities that have adopted the Malay faith and culture in recent centuries. When Europeans first visited the island, this population, dwelling for the most part, as it still does, in villages and small towns upon the coast and in or near the mouths of the rivers, owed allegiance to several Malay sultans and a number of subordinate rulers, the local rajahs and pangirans. The principal sultans had as their capitals, from which they took their titles, Bruni on the north-west, Sambas in the west, Pontianak at the mouth of the Kapuas river, Banjarmasin in the south at the mouth of the river of the same name, Pasir at the south-east corner, Kotei and Balungan on the east at the mouths of the rivers of those names; while the Sultan of Jolo, the capital of the Sulu islands, which lie off the north coast, claimed sovereignty over the northern end of Borneo. But these Malay sultans were not the first representatives in the island of culture and of civilised or semi-civilised rule; for history preserves some faint records of still earlier times, of which some slight confirmation is afforded by surviving traces of the culture then introduced.

In spite of all the work done on the history of the East Indies, most of what occurred before and much that followed the arrival of Europeans remains obscure. There are several Asiatic nations whose records might be expected to contain valuable information, but all are disappointing. The Klings, still the principal Hindu traders in the Far East, visited the Malay Archipelago in the first or at any rate the second century after Christ,[4] and introduced their writing[5] and chronology. But their early histories are meagre and unsatisfactory in the extreme. The Arab culture of the Malays, which took root in Sumatra in the twelfth century, is of course of no assistance in regard to events of earlier date, and does not give trustworthy and detailed accounts until the fifteenth century. The Chinese, on the other hand, always a literary people, carefully preserved in their archives all that could be gathered with regard to the "southern seas." But China was far away, and many local events would possess no interest for her subjects. Under the circumstances, the official historians deserve our gratitude for their geographical descriptions and for the particulars of tribute-bearing missions to the Son of Heaven, though they have little else to tell.

The first account we have been able to find referring to Borneo is a description of the kingdom of Poli from the Chinese annals of the sixth century. Poli was said to be on an island in the sea south-east of Camboja, and two months south-east of Canton. The journey thither was made by way of the Malay Peninsula, a devious route still followed by Chinese junks. Envoys were sent to the Imperial court in A.D. 518, 523, and 616. "The people of this country," our authority says, "are skilled in throwing a discus-knife, and the edge is like a saw; when they throw it at a man, they never fail to hit him. Their other arms are about the same as in China. Their customs resemble those of Camboja, and the productions of the country are the same as of Siam. When one commits a murder or theft they cut off his hands,[6] and when adultery has been committed, the culprit has his legs chained for the period of a year. For their sacrifice they choose the time when there is no moon; they fill a bowl with wine and eatables and let it float away on the surface of the water; in the eleventh month they have a great sacrifice. They get corals from the sea, and they have a bird called s'ari, which can talk." A later reference to the same place says: "They carry the teeth of wild beasts in their ears, and wrap a piece of cotton round their loins; cotton is a plant of

which they collect the flowers to make cloth of them; the coarser kind is called KUPA, and the finer cloth TIEH. They hold their markets at night, and cover their faces.... At the east of this country is situated the land of the Rakshas, which has the same customs as Poli." [7]

This is an interesting account in many ways, and tallies very closely with what other evidence would lead one to suspect. For there is reason to think that Bruni, before it became Mohammedan, was a Bisaya kingdom under Buddhist sovereigns and Hindu influence; and nearly all the particulars given with regard to the people of Borneo are true of one or other of the races allied to Bisayas and living near Bruni to-day. The discus-knife, a wooden weapon, is not now in use, but is known to have been used formerly. The wild Kadayans sacrifice after every new moon, and are forbidden to eat a number of things until they have done so. The Malanaus set laden rafts afloat on the rivers to propitiate the spirits of the sea. The very names of the two kinds of cotton, then evidently a novelty to the Chinese, are found in Borneo: KAPOK is a well-known Malay word; but TAYA is the common name for cotton among the Sea Dayaks, though it is doubtful whether it is found in Sumatra at all, and is not given in Marsden's great Dictionary. The use of teeth as ear-ornaments may refer to Kenyahs. If these identities are sufficient to show that Poli was old Bruni, we have an almost unique illustration here of the antiquity of savage customs. That an experience of fourteen hundred years should have failed to convince people of the futility of feeding salt waves is a striking demonstration of the widespread fallacy, that what is old must needs be good.

Poli had already attained a certain measure of civilisation, and even of luxury. The kingly dignity was hereditary, and the Buddhist monarch was served with much ceremony. He was clad in flowered silk or cotton, adorned with pearls, and sat on a golden throne attended by servants with white dusters and fans of peacock feathers. When he went out of his palace, his chariot, canopied with feathers and embroidered curtains, was drawn by elephants, whilst gongs, drums, and conches made inspiring music. As Hindu ornaments have been found at Santubong together with Chinese coins of great antiquity, as the names of many offices of state in Bruni are derived from Sanskrit, and the people of Sarawak have only lately ceased to speak of "the days of the Hindus," [8] there is nothing startling in the statement that the kings of Poli were Buddhist.

Whatever Poli may or may not have been, there is little question that Puni, 45 days from Java, 40 from Palembang, 30 from Champa, in each case taking the wind to be fair, was Bruni. The Chinese, who have neither B nor double consonants in their impoverished language, still call the Bornean capital Puni. Groeneveldt says that the Chinese consider Puni to have been on the west coast of Borneo. This state is mentioned several times in the annals of the Sung dynasty, which, though only ruling over Southern China, had a complete monopoly [9] of the ocean trade for three centuries (960 to 1279 A.D.). Puni was at that time a town of some 10,000 inhabitants, protected by a stockade of timber. The king's palace, like the houses of modern Bruni, was thatched with palm leaves, the cottages of the people with grass. Warriors carried spears and protected themselves with copper armour. When any native died, his corpse was exposed in the jungle, and once a year for seven years sacrifices were made to the departed spirit. Bamboos and palm leaves, thrown away after every meal, sufficed for crockery. The products of the country, or at least such as were sent as tribute, were camphor, tortoiseshell, and ivory. [10]

In the year 977, we are told, Hianzta, king of Puni, sent envoys to China, who presented tribute with the following words: "May the emperor live thousands and tens of thousands of years, and may he not disapprove of the poor civilities of my little country." The envoys presented a letter from the king. This was written on what looked like the very thin bark of a tree; it was glossy, slightly green, several feet long, and somewhat broader than one inch; the characters in which it was written were small, and had to be read horizontally. In all these particulars the letter resembled the books of magic which are still written by the Battas of inland Sumatra. [11] The message ran: "The king of Puni, called Hianzta, prostrates himself before the most august emperor, and hopes that the emperor may live ten thousands of years. I have now sent envoys to carry tribute; I knew before that there was an emperor, but I had no means of communication. Recently there was a merchant called Pu Lu, whose ship arrived at the mouth of my river; I sent a man to invite him to my place, and he told me that he came from China. The people of my country were much delighted at this, and preparing a ship, asked this stranger to guide them to the court. The envoys I have sent only wish to see Your Majesty in peace, and I intend to send people with tribute every year. But when I do so I fear that my ships may occasionally be blown to Champa, and I therefore hope Your Majesty will send an edict to that country with orders that, if a ship of Hianzta arrives there, it must not be detained. My country has no other articles, [12] and I pray Your Majesty not to be angry with me." The envoys were entertained and sent home with presents. In 1082 A.D., a hundred years later, Sri Maja, king of Puni, sent

tribute again, but the promise of yearly homage was not kept. Gradually the Sung dynasty declined in power, and East Indian potentates became less humble.

In the thirteenth and the early part of the fourteenth centuries Bruni owed allegiance alternately to two powers much younger than herself, Majapahit in Java, and Malacca on the west coast of the Malay Peninsula. Both these states were founded in the thirteenth century.[13] Majapahit, originally only one of several Javan kingdoms, rapidly acquired strength and subjugated her neighbours and the nearest portions of the islands around. Malacca, formed when the Malay colony of Singapore was overwhelmed by Javanese, became the great commercial depot of the Straits and the chief centre of Mohammedanism in the Archipelago. The two powers therefore stood for two faiths and two cultures: Majapahit for Brahminism and Hindu influence, Malacca for Islam and the more practical civilisation of Arabia.

In the earliest years of the fourteenth century Bruni was a dependency of Majapahit, but seems to have recovered its independence during the minority of the Javan king. It is to this time that the tradition of the Kapuas Malays ascribes the arrival of the Kayans in Borneo.[14] Then Angka Wijaya extended the power of Majapahit over Palembang in Sumatra, Timor, Ternate, Luzon, and the coasts of Borneo. Over Banjarmasin he set his natural son. In 1368 Javanese soldiers drove from Bruni the Sulu marauders who had sacked the town. A few years later the ungrateful king transferred his allegiance to China, and not long afterwards, with calculating humility, paid tribute[15] to Mansur Shah, who had succeeded to the throne of Malacca in 1374 A.D.

An extraordinary incident occurred at the beginning of the fifteenth century, which again -- and for the last time -- draws our attention to the Chinese court. The great Mongol conquerors, Genghis and Kublai Khan, had little to do with the Malay Archipelago, though the latter sent an unsuccessful expedition against Java in 1292. But the Ming emperors, who were of Chinese blood, came to power in 1368 and soon developed the maritime influence of the empire. For a few years there was a continual stream of East Indian embassies. During the last twenty years of the century, however, these became more rare, and in 1405 the Chinese emperor found it necessary to send a trusted eunuch, by name Cheng Ho, to visit the vassal states in the south. This man made several journeys, travelling as far as the shores of Africa, and his mission bore immediate fruit. Among others, Maraja Kali, king of Puni, although Cheng Ho does not appear to have called on him in person, sent tribute in 1405; and so pleased was he with the embroidered silk presented to him and his wife in return, that he visited the Son of Heaven three years later. Landing in Fukien, he was escorted by a eunuch to the Chinese capital amid scenes of great rejoicing. The emperor received him in audience, allowing him the honours of a noble of the first rank, and loaded him with gifts. The same year, having accomplished his one great ambition of "seeing the face of the Son of Heaven," this humbled monarch died in the imperial city, leaving his son Hiawang to succeed to the throne of Puni. Having induced the emperor to stop the yearly tribute of forty katties of camphor paid by Puni to Java, and having agreed to send tribute to China every three years, Hiawang returned home to take up the reins of government. Between 1410 and 1425 he paid tribute six times, besides revisiting the Chinese Court; but afterwards little Puni seems to have again ignored her powerful suzerain.

It is probable that the Chinese colony in North Borneo which gave its name to the lofty mountain Kina Balu (Chinese widow) and to the Kina Batangan, the chief river which flows from it, was founded about this time. Several old writers seem to refer to this event, and local traditions of the settlement still survive. The Brunis and Idaans (a people in the north not unlike the Bisayas) have legends differing in detail to the effect that the Chinese came to seize the great jewel of the Kina Balu dragon, but afterwards quarrelled about the booty and separated, some remaining behind. The Idaans consider themselves the descendants of these settlers, but that can only be true in a very limited sense. Both country and people, however, show traces of Chinese influence.

There is good evidence that the Chinese influence and immigration were not confined to Bruni and the northern end of the island. In south-west Borneo there are traces of very extensive washings of alluvial gravels for gold and diamonds. These operations were being conducted by Chinese when Europeans first came to the country; and the extent of the old workings implies that they had been continued through many centuries. Hindu-Javan influence also was not confined to the court of Bruni, for in many parts of the southern half of Borneo traces of it survive in the custom of burning the dead, in low relief carvings of bulls on stone, and in various gold ornaments of Hindu character.

The faith of Islam and the arrival of Europeans have profoundly affected the manners and politics of the East Indies, and now it is difficult to picture the state of affairs when King Hiawang revisited China to pay homage to

the Emperor. In 1521, within a hundred years of that event, Pigafetta, the chronicler of Magellan's great exploit, was calling on the "Moorish" king of Bruni, in the course of the first voyage round the world. The change had come. Of the two new influences, so potent for good and evil, Mohammedanism made its appearance first. The struggle for religious supremacy ended in the complete victory of the Prophet's followers in 1478, when Majapahit was utterly destroyed, thirty years before the capture of Malacca by the Portuguese.

How early the Arab doctrines were taught in Bruni is impossible to state with any precision. Local tradition ascribes their introduction to the renowned Alak ber Tata, afterwards known as Sultan Mohammed. Like most of his subjects this warrior was a Bisaya, and in early life he was not a Mohammedan, not indeed a civilised potentate at all, to judge by conventional standards; for the chief mark of his royal dignity was an immense chawat, or loin-cloth, carried as he walked by eighty men, forty in front and forty behind. He is the earliest monarch of whom the present Brunis have any knowledge, a fact to be accounted for partly by the brilliance of his exploits, partly by the introduction about that time of Arabic writing. After much fighting he subdued the people of Igan,[16] Kalaka, Seribas, Sadong, Semarahan, and Sarawak,[17] and compelled them to pay tribute. He stopped the annual payment to Majapahit of one jar of pinang juice, a useless commodity though troublesome to collect. During his reign the Muruts were brought under Bruni rule by peaceful measures,[18] and the Chinese colony was kept in good humour by the marriage of the Bruni king's brother and successor to the daughter of one of the principal Chinamen.

Alak ber Tata is said to have gone to Johore,[19] where he was converted[20] to Islam, given[21] the daughter of Sultan Bakhei and the title of Sultan, and was confirmed in his claim to rule over Sarawak and his other conquests.[22]

Sultan Mohammed was succeeded by his brother Akhmad, son-in-law of the Chinese chief, and he was in turn succeeded by an Arab from Taif who had married his daughter. Thus the present royal house of Bruni is derived from three sources — Arab, Bisaya, and Chinese. The coronation ceremony as still maintained affords an interesting confirmation of this account. On that occasion the principal minister wears a turban and Haji outfit, the two next in rank are dressed in Chinese and Hindu fashion, while the fourth wears a chawat over his trousers to represent the Bisayas; and each of these ministers declares the Sultan to be divinely appointed. Then after the demonstration of loyalty the two gongs — one from Menangkabau, the other from Johore — are beaten, and the Moslem high priest proclaims the Sultan and preaches a sermon, declaring him to be a descendant of Sri Turi Buana, the Palembang chief who founded the early kingdom of Singapore in 1160 A.D., who reigned in that island for forty-eight years, and whose descendants became the royal family of Malacca.

The Arab Sultan who succeeded Akhmed assumed the name Berkat and ruled the country with vigour. He built a mosque and converted many of his subjects, so that from his reign Bruni may be considered a Mohammedan town. To defend the capital he sank forty junks filled with stone in the river, and thus formed the breakwater which still bars the entrance to large ships. This work rose above the water level, and in former times bristled with cannon. Sultan Berkat was succeeded by his son Suleiman, whose reign was of little consequence.

Neglecting Suleiman, we come now to the most heroic figure in Bruni history, Sultan Bulkiah, better known by his earlier name, Nakoda Ragam. The prowess of this prince has been celebrated in prose and verse. He journeyed to distant lands, and conquered the Sulu islands and eastern Borneo. Over the throne of Sambas he set a weak-minded brother of his own. He even sent an expedition to Manila, and on the second attempt seized that place. Tribute poured into his coffers from all sides. His wife was a Javanese princess, who brought many people to Bruni. These intermarried with the Bisayas, and from them it is said are sprung the Kadayans, a quiet agricultural folk, skilled in various arts, but rendered timid by continual oppression. Some have settled recently in the British colony of Labuan, and others in Sarawak round the river Sibuti, where they have become loyal subjects of the Rajah of Sarawak.

Nakoda Ragam's capital at Buang Tawa was on dry land, but when he died, killed accidentally by his wife's bodkin, the nobles quarrelled among themselves, and some of them founded the present pile-built town of Bruni. It was to this Malay capital and court that Pigafetta paid his visit in 1521 with the surviving companions of Magellan. His is the first good account from European sources of the place which he called Bornei, and whose latitude he estimated with an error of less than ten miles.[23]

It is easy to see from Pigafetta's narrative[24] that at the date of his visit the effects of Nakoda Ragam's exploits had not evaporated. The splendour of the Court and the large population the city is said to have contained

were presumably the result of the conquests he had made in neighbouring islands. The king, like the princes of Malacca before the conquest, had his elephants, and he and his courtiers were clothed in Chinese satins and Indian brocades. He was in possession of artillery, and the appearance and ceremonial of his court was imposing.

From this time onwards the power of Bruni has continuously declined. Recurrent civil wars invited the occasional interventions of the Portuguese and of the Spanish governors of the Philippines, which, although they did not result in the subjugation of the Malay power, nevertheless sapped its strength.

The interest of the later history of Borneo lies in the successive attempts,[25] many of them fruitless, made by Dutch and English to gain a footing on the island. The Dutch arrived off Bruni in the year 1600, and ten days afterwards were glad to leave with what pepper they had obtained in the interval, the commander judging the place nothing better than a nest of rogues. The Dutch did not press the acquaintance, but started factories at Sambas, where they monopolised the trade. In 1685 an English captain named Cowley arrived in Bruni; but the English showed as little inclination as the Dutch to take up the commerce which the Portuguese had abandoned.

At Banjarmasin, on the southern coast, more progress was made. The Dutch arrived there before their English rivals, but were soon compelled by intrigues to withdraw. In 1704[26] the English factors on the Chinese island of Chusan, expelled by the imperial authorities and subsequently driven from Pulo Condar off the Cochin China coast by a mutiny, arrived at Banjarmasin. They had every reason to be gratified with the prospects at that port; for they could sell the native pepper to the Chinese at three times the cost price. But their bitter experiences in the China seas had not taught them wisdom; they soon fell out with the Javanese Sultan, whose hospitality they were enjoying, and after some bloody struggles were obliged to withdraw from this part of the island.

In 1747 the Dutch East India Company, which in 1705 had obtained a firm footing in Java, and in 1745 had established its authority over all the north-eastern coast of that island, extorted a monopoly of trade at Banjarmasin and set up a factory. Nearly forty years later[27] (1785), the reigning prince having rendered himself odious to his subjects, the country was invaded by 3000 natives of Celebes. These were expelled by the Dutch, who dethroned the Sultan, placing his younger brother on the throne; and he, in reward for their services, ceded to them his entire dominions, consenting to hold them as a vassal. This is the treaty under which the Dutch claim the sovereignty of Banjarmasin and whatever was once dependent on it. In this way the Dutch got a hold on the country which they have never relaxed; and, after the interval during which their possessions in the East Indies were administered by England,[28] they strengthened that hold gradually, year by year, till now two-thirds or more of the island is under their flag and feels the benefits of their rule. If there are still any districts of this large area where Dutch influence has even now barely made itself felt, they will not long remain in their isolation; for the Controleurs are extending their influence even into the most remote corners of the territory.

To turn again to the north-western coast and the doings of Englishmen, in 1763 the Sultan of Sulu ceded to the East India Company the territory in Borneo which had been given him when he killed the usurper Abdul Mubin in Bruni. In 1773 a small settlement was formed on the island of Balambangan, north of Bruni; and in the following year the Sultan of Bruni agreed to give this settlement a monopoly of the pepper trade in return for protection from piracy. In the next year, however, Balambangan was surprised and captured by the Sulus. It was reoccupied for a few months in 1803, and then finally forsaken.

Towards the end of the eighteenth century the Malays of Bruni, Sulu, and Mindanao, with native followers and allies, inspired we may suppose by the example of their European visitors, took to piracy — not that they had not engaged in such business before, but that they now prosecuted an old trade with renewed vigour. English traders still tried to pay occasional visits, but after the loss of the *MAY* in 1788, the *SUSANNA* in 1803, and the *COMMERCE* in 1806, with the murder of the crews, the Admiralty warned merchants that it was **CERTAIN DESTRUCTION** to go up river to Bruni. For forty years this intimation was left on British charts, and British seamen followed the humiliating counsel. Not until the early forties was peace restored, after an event of the most romantic and improbable kind, the accession of an English gentleman to the throne of Sarawak.

Of this incident, so fateful for the future of the western side of Borneo, it must suffice to say here that James Brooke, a young Englishman, having resigned his commission in the army of the British East India Company, invested his fortune in a yacht of 140 tons, with which he set sail in 1838 for the eastern Archipelago. His bold but vague design was to establish peace, prosperity, and just government in some part of that troubled area, whose beauties he had admired and whose misfortunes he had deplored on the occasion of an earlier voyage to the China seas. When at Singapore, he heard that the Malays of Sarawak, a district forming the southern extremity of the



## Pagan Tribes of Borneo, V1

Sultanate of Bruni, had rebelled against the Bruni nobles, and had in vain appealed to the Dutch Governor-general at Batavia for deliverance from their oppressors. Under the nominal authority of the Sultan, these Bruni nobles, many of whom were of Arab descent, had brought all the north-western part of Borneo to a state of chronic rebellion. They had taught the Sea Dayaks of the Batang Lupar and neighbouring rivers to join them in their piratical excursions, and, being to some extent dependent upon their aid, were compelled to treat them with some consideration; but all other communities were treated by them with a rapacity and cruelty which was causing a rapid depopulation and the return to jungle of much cultivated land.

Brooke sailed for Sarawak in August 1839, and found the country torn by internal conflicts. The Sultan had recently sent Muda Hasim, his uncle and heir-presumptive to the throne of Bruni, to restore order; but this weak though amiable noble had found himself quite incapable of coping with the situation. Brooke spent some time surveying the coast and studying the people and country, and gained the confidence of Muda Hasim. After an excursion to Celebes, Brooke sailed for a second visit to Sarawak just a year after the first, and found the state of the country going from bad to worse. Muda Hasim besought him to take command of his forces and to suppress the rebellion. Brooke consented, and soon secured the submission of the rebel leaders on the condition that he (Brooke), and not any Bruni noble, should be the governor and Rajah of Sarawak. Muda Hasim had offered to secure his appointment to this office as an inducement to him to undertake the operations against the rebels; Brooke therefore felt himself justified in granting these terms. And when later Muda Hasim, no longer threatened with disgrace and failure, showed himself disinclined to carry out this arrangement, Brooke, feeling himself bound by his agreement with the rebel leaders, whose lives he had with difficulty preserved from the vengeance of the Bruni nobles, insisted upon it with some show of force; and on September 24, 1841, he was proclaimed Rajah and governor of Sarawak amid the rejoicings of the populace. Muda Hasim, as representative of the Sultan, signed the document which conferred this title and authority; but since he was not in any proper sense Rajah of Sarawak, which in fact was not a raj, but a district hitherto ruled or misruled by Bruni governors not bearing the title of Rajah, this transaction cannot properly be described as an abdication by Muda Hasim in favour of Brooke. Brooke accordingly felt that it was desirable to secure from the Sultan himself a formal recognition of his authority and title. To this end he visited the Sultan in the year 1842, and obtained from him the desired confirmation of the action of his agent Muda Hasim. The way in which the raj of Sarawak has since been extended, until it now comprises a territory of nearly 60,000 square miles (approximately equal to the area of England and Wales), will be briefly described in a later chapter (XXII.).

The northern end of Borneo had long been a hunting-ground for slaves for the nobles of Bruni and Sulu, whose Sultans claimed but did not exercise the right to rule over it. In 1877 Mr. Alfred Dent, a Shanghai merchant, induced the two Sultans to resign to him their sovereign rights over this territory in return for a money payment. The British North Borneo Company, which was formed for the commercial development of it, necessarily undertook the task of pacification and administration. In 1881 the company was granted a royal charter by the British Government; and it now administers with success and a fair prospect of continued commercial profit a territory which, with the exception of a small area about the town of Bruni, includes all of the island that had not been brought under the Dutch or Sarawak flag. In 1888 Sarawak and British North Borneo were formally brought under the protection of the British Government; but the territories remained under the rule of the Rajah and of the company respectively, except in regard to their foreign relations. In the year 1906 the Sultan of Bruni placed himself and his capital, together with the small territory over which he still retained undivided authority, under the protection of the British Government; and thus was completed the passing of the island of Borneo under European control.

## CHAPTER 3. General Sketch of the Peoples of Borneo

It is not improbable that at one time Borneo was inhabited by people of the negrito race, small remnants of which race are still to be found in islands adjacent to all the coasts of Borneo as well as in the Malay Peninsula. No communities of this race exist in the island at the present time; but among the people of the northern districts individuals may be occasionally met with whose hair and facial characters strongly suggest an infusion of negrito or negroid blood.

It is probable that the mixed race of Hindu–Javanese invaders, who occupied the southern coasts of Borneo some centuries ago, became blended with the indigenous population, and that a considerable proportion of their blood still runs in the veins of some of the tribes of the southern districts (E.G. the Land Dayaks and Malohs).

There can be no doubt that of the Chinese traders who have been attracted to Borneo by its camphor, edible birds' nests, and spices, some have settled in the island and have become blended with and absorbed by the tribes of the north–west (E.G. the Dusuns); and it seems probable that some of the elements of their culture have spread widely and been adopted throughout a large part of Borneo. For several centuries also Chinese settlers have been attracted to the south–western district by the gold which they found in the river gravel and alluvium. These also have intermarried with the people of the country; but they have retained their national characteristics, and have been continually recruited by considerable numbers of their fellow countrymen. Since the establishment of peace and order and security for life and property by the European administrations, and with the consequent development of trade during the last half–century, the influx of Chinese has been very rapid; until at the present time they form large communities in and about all the chief centres of trade. A certain number of Chinese traders continue to penetrate far into the interior, and some of these take wives of the people of the country; in many cases their children become members of their mothers' tribes and so are blended with the native stocks.

Among the Mohammedans, who are found in all the coast regions of Borneo, there is a considerable number of persons who claim Arab forefathers; and there can be no doubt that the introduction of the Mohammedan religion was largely due to Arab traders, and that many Arabs and their half–bred descendants have held official positions under the Sultans of Bruni.

During the last half–century, natives of India, most of whom are Klings from Madras, have established themselves in the small trades of the towns; and of others who came as coolies, some have settled in the towns with their wives and families. These people do not penetrate into the interior or intermarry with the natives.

With the exception of the above–mentioned immigrants and their descendants, the population of Borneo may be described as falling naturally into two great classes; namely, on the one hand those who have accepted, nominally at least, the Mohammedan religion and civilisation, and on the other hand the pagan peoples. In Bruni and in all the coast regions the majority of the people are Mohammedan, have no tribal organisation, and call themselves Malays (Orang Malayu). This name has usually been accorded them by European authors; but when so used the name denotes a social, political, and religious status rather than membership in an ethnic group. With the exception of these partially civilised "Malays" of the coast regions and the imported elements mentioned above, all the natives of Borneo live under tribal organisation, their cultures ranging from the extreme simplicity of the nomadic Punans to a moderately developed barbarism. All these pagan tribes have often been classed together indiscriminately under the name Dyaks or Dayaks, though many groups may be clearly distinguished from one another by differences of culture, belief, and custom, and peculiarities of their physical and mental constitutions.

The Mohammedan population, being of very heterogeneous ethnic composition, and having adopted a culture of foreign origin, which may be better studied in other regions of the earth where the Malay type and culture is more truly indigenous, seems to us to be of secondary interest to the anthropologist as compared with the less cultured pagan tribes. We shall therefore confine our attention to the less known pagan tribes of the interior; and when we speak of the people of Borneo in general terms it is to the latter only that we refer (except where the "Malays" are specifically mentioned). Of these we distinguish six principal groups: (1) Sea Dayaks or Ibans, (2)

the Kayans, (3) Kenyahs, (4) Klemantans, (5) Muruts, (6) Punans.

A census of the population has been made in most of the principal districts of Sarawak and of Dutch Borneo; but as no census of the whole country has hitherto been made, it is impossible to state with any pretence to accuracy the number of the inhabitants of the island. Basing our estimate on such partial and local enumerations as have been made, we believe the total population to be about 3,000,000. Of these the Chinese immigrants and their descendants, who are rapidly increasing in number, probably exceed 100,000. The Malays and the native converts to Islam, who constitute with the Chinese the population of the towns and settled villages of the coast districts, probably number between three and four hundred thousand; the Indian immigrants are probably not more than 10,000; the Europeans number perhaps 3000; the rest of the population is made up of the six groups of barbarians named in the foregoing paragraph.

Any estimate of the numbers of the people of each of these six divisions is necessarily a very rough one, but it is perhaps worth while to state our opinion on this question as follows: Klemantans, rather more than 1,000,000; Kenyahs, about 300,000; Muruts, 250,000; Sea Dayaks, 200,000; Kayans, 150,000; Punans and other peoples of similar nomadic habits, 100,000 — I.E. a total of 2,000,000.

(1) Of all these six peoples the Sea Dayaks have become best known to Europeans, largely owing to their restless truculent disposition, and to the fact that they are more numerous in Sarawak than any of the others. They have spread northwards over Sarawak during the latter half of the last century, chiefly from the region of the Batang Lupar, where they are still numerous. They are still spreading northward, encroaching upon the more peaceful Klemantan tribes. They are most densely distributed in the lower reaches of the main rivers of Sarawak, especially the Batang Lupar and Saribas rivers, which are now exclusively occupied by them; but they are found also in scattered communities throughout almost all parts of Sarawak, and even in British North Borneo, and they extend from their centre in Sarawak into the adjacent regions of Dutch Borneo, which are drained by the northern tributaries of the Great Kapuas River.

The Sea Dayak is of a well-marked and fairly uniform physical type. His skin is distinctly darker than that of the other peoples of the interior, though not quite so dark as that of most of the true Malays. The hair of his head is more abundant and longer than that of other peoples. His figure is well proportioned, neat, and generally somewhat boyish. His expression is bright and mobile, his lips and teeth are generally distorted and discoloured by the constant chewing of betel nut. They are a vain, dressy, boastful, excitable, not to say frivolous people — cheerful, talkative, sociable, fond of fun and jokes and lively stories; though given to exaggeration, their statements can generally be accepted as founded on fact; they are industrious and energetic, and are great wanderers; to the last peculiarity they owe the name of Iban, which has been given them by the Kayans, and which has now been generally adopted even by the Sea Dayaks themselves.

The good qualities enumerated above render the Iban an agreeable companion and a useful servant. But there is another side to the picture: they have little respect for their chiefs, a peculiarity which renders their social organisation very defective and chaotic; they are quarrelsome, treacherous, and litigious, and the most inveterate head-hunters of the country; unlike most of the other peoples, they will take heads for the sake of the glory the act brings them and for the enjoyment of the killing; in the pursuit of human victims they become possessed by a furious excitement that drives them on to acts of the most heartless treachery and the most brutal ferocity.

All the Sea Dayaks speak one language, with but slight local diversities of dialect. It is extremely simple, being almost devoid of inflections, and of very simple grammatical structure, relying largely on intonation. It is closely allied to Malay.

(2) The Kayans are widely distributed throughout central Borneo, and are to be found in large villages situated on the middle reaches of all the principal rivers with the exception of those that run to the north coast. They occupy in the main a zone dividing the districts of the lower reaches of the rivers from the central highlands from which all the rivers flow.

They are a warlike people, but less truculent than the Sea Dayaks, more staid and conservative and religious, and less sociable. They do not wantonly enter into quarrels; they respect and obey their chiefs. They are equally industrious with the Sea Dayaks, and though somewhat slow and heavy in both mind and body, they are more skilled in the handicrafts than any of the other peoples. They also speak one language, which presents even less local diversity than the Sea Dayak language.

(3) The Kenyahs predominate greatly in the highlands a little north of the centre of Borneo where all the large

rivers have their sources; but they are found also in widely scattered villages throughout the Kayan areas. In all respects they show closer affinities with the Kayans than with the Sea Dayaks; as regards custom and mode of life they closely resemble the Kayans, with whom they are generally on friendly terms; but they are easily distinguished from the Kayans by well-marked differences of bodily and mental characters, as well as by language. Physically they are without question the finest people of the country. Their skin-colour is decidedly fairer than that of Sea Dayaks or Kayans. They are of medium stature, with long backs and short, muscular, well-rounded limbs; a little stumpy in build, but of graceful and vigorous bearing. They are perhaps the most courageous and intelligent of the peoples; pugnacious, but less quarrelsome than the Sea Dayak; more energetic and excitable than the Kayan; hospitable and somewhat improvident, sociable and of pleasant manners; less reserved and of more buoyant temperament than the Kayan; very loyal and obedient to their chiefs; more truthful and more to be depended upon under all circumstances than any of the other peoples, except possibly the Kayans.

The Kenyahs speak a number of dialects of the same language, and these differ so widely that Kenyahs of widely separated districts cannot converse freely with one another; but, as with all the peoples, except the Sea Dayaks, nearly every man has the command of several dialects as well as of the Kayan language.

(4) The Klemantans. Under this name we group together a number of tribes which, though in our opinion closely allied, are widely scattered in all parts of Borneo, and present considerable diversities of language and custom. In physical and mental characters they show affinities to the Kenyahs on the one hand and to the Muruts on the other. They are less bellicose than the peoples mentioned above, and have suffered much at their hands. They are careful, intelligent, and sociable, though somewhat timid, people; skilful in handicrafts, but less energetic than the Kayans and Kenyahs, and inferior to them in metal work and the making of swords and spears and boats. The blow-pipe is their characteristic weapon, and they are more devoted to hunting than any others, except the Punans.

Klemantans are to be found in every part of the island, but most of their villages are situated on the lower reaches of the rivers. They are most abundant in the south, constituting the greater part of the population of Dutch Borneo; in the north they are few, their place being filled by their near relatives, the Muruts. The latter constitute the principal part of the population of the northern end of the island, predominating over all the other peoples in British North Borneo, and in the northern extremities of Sarawak and of Dutch Borneo.

(5) The Muruts are confined to the northern part of Borneo. They resemble the Klemantans more closely than the other peoples. They are comparatively tall and slender, have less regular and pleasing features than the Klemantans, and their skin is generally darker and more ruddy in colour. Their agriculture is superior to that of the other peoples, but they are addicted to much drinking of rice-spirit. Their social organisation is very loose, their chiefs having but little authority. Besides those who call themselves Muruts, we class under the same general name several tribes which we regard as closely allied to them; namely, the Adangs in the head of the Limbang; the Kalabits about the head of the Baram; the Sabans and Kerayans at the head of the Kerayan river; the Libuns; the Lepu Asings at the head of the Bahau; Tagals and Dusuns in the most northerly part; the Trings of the Barau and Balungan rivers on the east.

(6) The Punans, among whom we include, beside the Punans proper, the Ukits and a few other closely allied but widely scattered small groups, are the only people who do not dwell in villages established on the banks of the rivers. They live in small groups of twenty or thirty persons, which wander in the jungle. Each such group is generally made up of a chief and his descendants. The group will spend a few weeks or months at a time in one spot (to which generally they are attracted by the presence of wild sago), dwelling in rude shelters of sticks and leaves, and then moving on, but generally remaining within some one area, such as the basin of one of the upper tributaries of a large river. They are found throughout the interior of Borneo, but are difficult to meet with, as they remain hidden in the depths of the forests. Unlike all the other peoples, they cultivate no PADI (rice), and they do not make boats or travel on the rivers. They support themselves by hunting with the blow-pipe, by gathering the wild jungle fruits, and by collecting the jungle products and bartering them with the more settled peoples. In physical characters they closely resemble the Kenyahs, being well-built and vigorous; their skin is of very light yellow colour, and their features are regular and well shaped. Mentally they are characterised by extreme shyness and timidity and reserve. They are quite inoffensive and never engage in open warfare; though they will avenge injuries by stealthy attacks on individuals with the blow-pipe and poisoned darts. Their only handicrafts are the making of baskets, mats, blow-pipes, and the implements used for working the wild sago; but in these and in the

use of the blow-pipe they are very expert. All other manufactured articles used by them — cloths, swords, spears — are obtained by barter from the other peoples. Unlike all the other peoples, they have no form of sepulture, but simply leave the corpse of a comrade in the rude shelter in which he died. They sing and declaim rude melancholy songs or dirges with peculiar skill and striking effect. Their language is distinctive, but is apparently allied to the Kenyah and Klemantan tongues.

We propose to deal with the topics of each of our descriptive chapters by giving as full as possible an account of the Kayans, and adding to this some observations as to the principal diversities of custom and culture presented by the other peoples. For, if we should attempt to describe in detail each of these peoples with all their local diversities, this book would attain an inordinate length. The Kayans are in most respects the most homogeneous of these peoples, the most conservative and distinctive, and present perhaps the richest and most interesting body of belief and custom and art; while many of their customs and arts have been adopted by their neighbours, or are indigenous with them.

We may conclude this chapter by describing briefly in general terms the physical characters, and the habits and customs that are common to all or most of these pagan tribes.

These peoples present no very great differences of physical character. All are of medium height; their skin-colour ranges from a rich medium brown to a very pale CAFE-AU-LAIT, hardly deeper than the colour of cream. Their hair is nearly black or very dark brown, and generally quite lank, but in some cases wavy or even almost curly. Their faces show in nearly all cases, though in very diverse degrees, some of the well-known mongoloid characters, the wide cheek-bones, the small oblique eyes, the peculiar fold of the upper eyelid at its nasal end, and the scanty beard. In some individuals these traces are very slight and in fact not certainly perceptible. The nose varies greatly in shape, but is usually rather wide at the nostrils, and in very many cases the plane of the nostrils is tilted a little upwards and forwards. On the other hand some individuals, especially among the Kenyahs, have distinctly aquiline and well-formed noses. Amongst all these peoples, especially the Kenyahs, Punans, and Klemantans, there are to be seen a few individuals of very regular well-shaped features of European type.

Although as regards physical characters all these peoples have much in common, yet each of them presents peculiarities which are obvious to the eye of an experienced observer, and enable him without hesitation to assign to their proper groups the majority of individuals; and such recognition on mere inspection is of course rendered easier by the relatively slight peculiarities of dress and ornament proper to each group.

The pure-bred Kenyah presents, perhaps, the most clearly marked as well as the finest physical type. His skin, is the colour of rich cream with a very small dash of coffee. The hair of his head varies from slightly wavy to curly, and is never very abundant or long in the men. The rest of his body is almost free from hair, and what little grows upon the face is carefully plucked out (not, leaving even the eyebrows and eyelashes). This practice is common to all the peoples of the interior except the Sea Dayaks. His stature is about 1600 mm.; his weight about 136 pounds. His limbs are distinctly short in proportion to his body; his trunk is well developed and square, and both limbs and trunk are well covered with rounded muscles. His movements are quick and vigorous, and he is hardy and capable of sustaining prolonged toil and hardship. His head is moderately round (Index 79), his face broad but well shaped. The expression of his face is bold and open.

The Kayan has a rather darker skin of a redder tone. His legs are not so disproportionately short, but in all other respects his body is less well proportioned, graceful, and active than the Kenyah's. His features are less regular and rather coarser and heavier; his expression is serious, reserved, and cautious.

The Murut is nearly as fair skinned as the Kenyah, perhaps a little ruddier in tone. His most characteristic feature is the length of his leg and lack of calf, in both of which respects he contrasts strongly with the Kenyah. The length of his leg raises his stature above the average. His intonation is characteristic, namely, somewhat whining; whereas the Kenyah's speech is crisp and staccato.

The Klemantans present a greater variety of physical types, being a less homogeneous group. Roughly they may be said to present all transitions from the Kenyah to the Murut type. In the main they are less muscular and active than the Kenyah. It is amongst them that the upward and forward direction of the plane of the nostrils is most marked.

The Punan presents, again, a well-marked type. His skin is even fairer than the Kenyah's, and is distinguished by a distinctly greenish tinge. He is well proportioned, graceful, and muscular, and his features are in many cases

very regular and pleasing. His expression is habitually melancholy and strikingly wary and timid. In spite of his homeless nomadic life he generally appears well nourished and clean, and he seems less subject to sores and to the skin diseases which so often disfigure the other peoples, especially the Muruts, Kayans, and Sea Dayaks.[29]

All these peoples, with the exception of the Punans and similar nomads, live in village communities situated with few exceptions on the banks of the rivers. The populations of these villages vary from 20 or 30 persons only in the smallest, to 1500 or even more in a few of the largest; while the average village comprises about 30 families which, with a few slaves and dependants, make a community of some 200 to 300 persons. Each such community is presided over by a chief. A number of villages of one people are commonly grouped within easy reach of one another on the banks of a river. But no people exclusively occupies or claims exclusive possession of any one territory or waterway. With the exception of the Sea Dayaks, all these different peoples may here and there be found in closely adjoining villages; and in some rivers the villages of the different peoples are freely intermingled over considerable areas. The segregation of the Sea Dayak villages seems to be due to the truculent treacherous nature of the Sea Dayak, which renders him obnoxious as a neighbour to the other peoples, and leads him to feel the need of the support of his own people in large numbers. All find their principal support and occupation in the cultivation of PADI (rice), and all supplement this with the breeding of a few pigs and fowls and, in the north of the island, buffalo, with hunting and fishing, and with the collection of jungle produce — gutta-percha, rubber, rattan canes, camphor, sago. These jungle products they barter or sell for cash to the Malay and Chinese traders.

They have no written records, and but vague traditions of their past history and migrations. There is no political organisation beyond a loose coherence and alliance for defence and offence of the village communities of any one people in neighbouring parts of the country — a coherence which at times is greatly strengthened by the personal ascendancy of the chief of some one village over neighbouring chiefs. One of the most notable examples of such personal ascendancy exercised in recent times was that of Tama Bulan (Pl. 27), a Kenyah chief whose village was situated on one of the tributaries of the Baram river, and who by his loyal co-operation with the government of the Rajah of Sarawak greatly facilitated the rapid establishment of law and order in this district.

Except for these informal alliances obtaining between neighbouring villages of the people of any one stock, each village forms an independent community, ruled by its chief, making war and peace and alliances, and selecting patches of land for cultivation at its own pleasure. No village community remains on the same spot for any long period; but after fifteen, ten, or even fewer years, a new site is sought, often at a considerable distance, and a new village is built. The principal reasons for this habit of frequent migration, which has produced the intimate mingling throughout large areas of the peoples of different stocks, are two: first, the necessity of finding virgin soil for cultivation; secondly, the occurrence of epidemics or other calamities; these lead them to believe that the place of their abode supplies in insufficient degree the favouring spiritual influences which they regard as essential to their welfare. For among all these peoples animistic beliefs abound; they hold themselves to be surrounded on every hand by spiritual forces both good and bad, some of which are embodied in the wild creatures, especially the birds, while some are manifested in such natural processes as the growth of the corn, the rising of the river in flood, the rolling of thunder, the incidence of disease. And they are constantly concerned to keep at a distance, by the observance of many rigidly prescribed customs, the evil influences, and, to a less degree, to secure by propitiatory acts the protection and the friendly warnings of the beneficent powers.

One of the most peculiar features of the people of Borneo is the great diversity of language obtaining among them. The migratory habits of the people and the consequent mingling of communities of different stocks within the same areas, far from having resulted in the genesis by fusion of a common language, have resulted in the formation of a great number of very distinct dialects; so that in following the course of a river, one may sometimes find in a day's journey of a score of miles half a dozen or more villages, the people of each of which speak a dialect almost, or in some cases quite, unintelligible to their neighbours. A necessary consequence of this state of affairs is that, with the exception of the Sea Dayaks, almost all adults speak or at least understand two or more dialects or languages, while most of the chiefs and leading men speak several dialects fluently and partially understand a larger number. The language most widely understood by those to whom it is not native is the Kayan; but since the recent spread of trade through large areas under the protection of the European governments, a simplified form of the Malay language has been rapidly establishing itself as the LINGUA FRANCA of the whole country. In Sarawak, where, during the last fifty years, the Sea Dayaks have spread from the Batang Lupar district

## Pagan Tribes of Borneo, V1

and have established villages on all the principal rivers, their language, which seems to be a bastard and very simple branch of the Malay tongue, is very widely understood and is largely used as a common medium.

Note on the use of the term KLEMANTAN. The Malay name for Borneo is Pulu Klemantan, and we have adopted this name to denote the large group of allied tribes which in our opinion have the best claim to be regarded as representing the indigenous population of the island.

## CHAPTER 4. Material Conditions of the Pagan Tribes of Borneo

With few exceptions, the main features of the dress, adornment, and weapons of all the peoples are similar, showing only minor differences from tribe to tribe and from place to place. The essential and universal article of male attire is the waist-cloth, a strip of cloth about one yard wide and four to eight yards in length (see Frontispiece). Formerly this was made of bark-cloth; but now the cotton-cloth obtained from the Chinese and Malay traders has largely superseded the native bark-cloth, except in the remoter regions; and here and there a well-to-do man may be seen wearing a cloth of more expensive stuff, sometimes even of silk. One end of such a cloth is passed between the legs from behind forwards, about eighteen inches being left dependent; the rest of it is then passed several times round the waist, over the end brought up on to the belly, and the other end is tucked in at the back. The man wears in addition when out of doors a coat of bark-cloth or white cotton stuff,[30] and a wide sun-hat of palm leaves, in shape like a mushroom-top or an inverted and very shallow basin, which shelters him from both sun and rain; many wear also a small oblong mat plaited of rattan-strips hanging behind from a cord passed round the waist, and serving as a seat when the wearer sits down. At home the man wears nothing more than the waist-cloth, save some narrow plaited bands of palm fibre below the knee, and, in most cases, some adornment in the ears or about the neck and on the arms.[31] The man's hair is allowed to grow long on the crown of the scalp, and to hang freely over the back of the neck, in some cases reaching as far as the middle of the back. This long hair is never plaited, but is sometimes screwed up in a knot on the top of the head and fastened with a skewer. The latter mode of wearing the hair is the rule among the Muruts, who use elaborately carved and decorated hairpins of bone (the shin bone of the deer, Fig. 1). That part of the hair of the crown which naturally falls forwards is cut to form a straight fringe across the forehead. All the rest of the head is kept shaven, except at times of mourning for the death of relatives.

When in the house the man commonly wears on his head a band of plaited rattan, which varies from a mere band around the brows to a completed skull-cap. The free ends of the rattan strips are generally allowed to project, forming a dependent tassel or fringe (Pl. 21). A well-to-do Kayan man usually wears a necklace consisting of a single string of beads, which in many cases are old and of considerable value (Pls. 19 and 28). Every Kayan has the shell of the ear perforated, and when fully dressed wears, thrust forward through the hole in each shell, the big upper canine tooth of the tiger-cat; but he is not entitled to wear these until he has been on the warpath. Those who have taken a head or otherwise distinguished themselves in war may wear, instead of the teeth, pieces of similar shape carved from the solid beak of the helmeted hornbill. The youths who have not qualified themselves for these adornments, and warriors during mourning, usually wear a disc of wood or wax in their places (Pls. 19 and 21).

The lobe of the ear is perforated and distended to a loop some two inches in length, in which a brass ring is worn. Just above this loop a small hole through the shell is usually made, and from this a small skein of beads depends. Similar ear ornaments are worn by Kenyahs and some of the Klemantans, but not by Muruts, and by few individuals only among Punans and Sea Dayaks. Many of the latter wear a row of small brass rings inserted round the margin of the shell of each ear (Fig. 2).

Many of the men wear also bracelets of shell or hard wood.

Although the dress of the men is so uniform in essentials throughout the country, it gives considerable scope for the display of personal tastes, and the Sea Dayak especially delights in winding many yards of brilliantly coloured cloth about his waist, in brilliant coats and gorgeous turbans[32] and feathers, and other ornaments; by means of these he manages to make himself appear as a very dressy person in comparison with the sober Kayan and with most of the people of the remoter inland regions, who have little but scanty strips of bark-cloth about the loins.

The universal weapons of the country are sword and spear, and no man travels far from home without these and his oblong wooden shield. Some of the peoples are expert in the use of the blowpipe and poisoned dart. The blow-pipe and the recently introduced firearms are the only missile weapons; the bow is unknown save as a



plaything for children,[33] and possibly in a few localities in the extreme north.[34]

The dress of the women is less uniform than that of the men. The Sea Dayak woman (Pls. 29 and 30) wears a short skirt of cotton thread woven in curious patterns of several colours, reaching from the waist almost to the knee; a long-sleeved jacket of the same material, and a corset consisting of many rings of rattan built up one above another to enclose the body from breast to thigh. Each rattan ring is sheathed in small rings of beaten brass. The corset is made to open partially or completely down the front, but is often worn continuously for long periods. She wears her hair tied in a knot at the back of her head.

The principal garment of the women of all the other peoples is a skirt of bark or cotton cloth, which is tied by a string a little below the level of the crest of the hip bone; it reaches almost to the ankle, but is open at the left side along its whole depth. It is thus a large apron rather than a skirt. When the woman is at work in the house or elsewhere, she tucks up the apron by drawing the front flap backwards between her legs, and tucking it tightly into the band behind, thus reducing it to the proportions and appearance of a small pair of bathing-drawers. Each woman possesses also a long-sleeved, long-bodied jacket of white cotton similar to that worn by the men; this coat is generally worn by both sexes when working in the fields or travelling in boats, chiefly as a protection against the rays of the sun. The women wear also a large mushroom-shaped hat similar to that worn by the men. With few exceptions all the women allow the hair to grow uncut and to fall naturally from the ridge of the cranium, confined only by a circular band of rattan or beadwork passing over the occiput and just above the eyebrows.

The principal ornaments of the women are necklaces and girdles of beads, earrings, and bracelets. A well-to-do Kayan woman may wear a large number of valuable beads (see Pls. 28 and 31). The bracelets are of ivory, and both forearms are sometimes completely sheathed in series of such bracelets. The ear-rings are the most distinctive feature of the Kayan woman's adornment. The perforated lobes of the ears are gradually drawn down during childhood and youth, until each lobe forms a slender loop which reaches to the collar-bone, or lower. Each loop bears several massive rings of copper (Pl. 20), whose combined weight is in some cases as much as two pounds.[35] Most of the Kenyah women also wear similar earrings, but these are usually lighter and more numerous, and the lobe is not so much distended. The women of many of the Klemantan tribes wear a large wooden disc in the distended lobe of each ear, and those of other Klemantan tribes wear a smaller wooden plug with a boss (Pl. 32). The children run naked up to the age of six or seven years, when they are dressed in the fashion of their parents.

On festive occasions both men and women put on as many of their ornaments as can be conveniently worn.

#### Deformation of the Head

Some of the Malanaus, a partially Mohammedan tribe of Klemantans, seated about the mouths of the Muka, Oya, and Bintulu rivers of Sarawak, have the curious custom of flattening the heads of the infants, chiefly the females. The flattening is effected at an early age, the process beginning generally within the first month after birth. It consists in applying pressure to the head by means of a simple apparatus for some fifteen minutes, more or less, on successive days, or at rather longer intervals. The application of the pressure for this brief space of time, on some ten to twenty occasions, seems to suffice to bring about the desired effect. The pressure is applied while the child sleeps, and is at once relaxed if the child wakes or cries. The apparatus, known as TADAL (see Fig. 3), consists of a stout flat bar of wood, some nine inches in length and three wide in its middle part. This wider middle part bears on one surface a soft pad for application to the infant's forehead. A [inverted T] strap of soft cloth is attached by its upper extremity to the middle of the upper edge of the wooden bar; and each end of its horizontal strip is continued by a pair of strings which pass through holes in the ends of the bar. The strings are brought together on the front of the bar at its middle and passed through the centre of a copper coin[36] or other hard disc. The bar is applied transversely to the forehead of the infant; the vertical strap runs back over the sagittal suture; the transverse strap is drawn tightly across the occiput, and the required degree of pressure is gradually applied by twisting the coin round and round on the front of the bar, and so pulling upon the strings which connect the ends of the bar on the forehead with the ends of the strap across the occiput (Pl. 33).

The effect produced is of course a flattening of brow and occiput and a broadening of the whole head. The motive seems to be the desire to enhance the beauty of the child by ensuring to it a moon-like face, which is the most admired form. The Malanaus seem to be by nature peculiarly round-headed; the question whether this is due to the effects of head-flattening practised for many generations, must be left to the investigations of the

Neo-Lamarckians. They are also a peculiarly handsome people, and it seems more likely that, taking a pride in their good looks, they have, like so many other peoples, sought to enhance the beauty of their children by accentuating a racial peculiarity.

#### Houses

All the tribes except the Punans build houses of one type; but the size and proportions, the strength of the materials used, and the skill and care displayed in the work of construction, show wide differences. The houses of the Kayans are perhaps better and more solidly built than any others and may be taken as the type. Each house is built to accommodate many families; an average house may contain some forty to fifty, making up with children and slaves some two or three hundred persons; while some of the larger houses are built for as many as a hundred and twenty families, or some five to six hundred persons. The house is always close to a river, and it usually stands on the bank at a distance of 20 to 50 yards from the water, its length lying parallel to the course of the river. The plan of the house is a rectangle, of which the length generally much exceeds the width (Pl. 34).

Its roof is always a simple ridge extending the whole length of the house, and is made of shingles of BILIAN (ironwood) or other hard and durable kind of wood. The framework of the roof is supported at a height of some 25 to 30 feet from the ground on massive piles of ironwood, and the floor is supported by the same piles at a level some 7 or 8 feet below the cross-beams of the roof. The floor consists of cross-beams morticed to the piles, and of very large planks of hard wood laid upon them parallel to the length of the house. The projecting eaves of the roof come down to a level midway between that of the roof-beams and that of the floor, and the interval of some 4 to 5 feet between the eaves and the floor remains open along the whole length of the front of the house (I.E. the side facing the river), save for a low parapet which bounds the floor along its outer edge. This space serves to admit both light and air, and affords an easy view over the river to those sitting in the house. The length of the house is in some cases as much as 400 yards, but the average length is probably about 200 yards. The width of the floor varies from about 30 to 60 feet; the whole space between roof and floor is divided into two parts by a longitudinal wall of vertical planks, which runs the whole length of the house. This wall lies not quite in the middle line, but a little to the river side of it. Of the two longitudinal divisions of the house, that which adjoins the river is thus somewhat narrower than the other; it remains undivided in its whole length. The other and wider part is divided by transverse walls at intervals of some 25 or 30 feet, so as to form a single row of spacious chambers of approximately equal size. Each such chamber is the private apartment of one family; in it father, mother, daughters, young sons and female slaves, sleep and eat (Pl. 37). Within each chamber are usually several sleeping-places or alcoves more or less completely screened or walled off from the central space. The chamber contains a fireplace, generally merely a slab of clay in a wooden framework placed near the centre. The outside wall of this side of the house is carried up to meet the roof. The entrance of light and air and the egress of smoke are provided for by the elevation on a prop of one corner of a square section of the roof, marked out by a right-angled cut, of which one limb runs parallel to the outer wall, the other upwards from one extremity of the former. This aperture can be easily closed, E.G. during heavy rain, by removing the prop and allowing the flap to fall into its original position.

The front part of the house, which remains undivided, forms a single long gallery serving as a common antechamber to all the private rooms, each of which opens to it by a wooden door (Pls. 36, 38). It is in a sense, though roofed and raised some 20 feet above the ground, the village street, as well as a common living and reception room. Along the outer border of the floor runs a low platform on which the inmates sit on mats. One part of this, usually that opposite the chief's apartment in the middle of the house, is formed of several large slabs of hardwood (TAPANG or Koompassia), and is specially reserved for the reception of guests and for formal meetings. The platform is interrupted here and there by smaller platforms raised some 3 or 4 feet from the floor, which are the sleeping quarters assigned to the bachelors and male visitors. At intervals of some 30 or 40 feet throughout the gallery are fireplaces similar to those in the private chambers; on some of these fire constantly smoulders.

Over one of these fireplaces, generally one near the middle of the great gallery, is hung a row of human heads (Pl. 38), trophies obtained in war, together with a number of charms and objects used in various rites.[37]

Alongside the inner wall of the gallery stand the large wooden mortars used by the women in husking the PADI. Above these hang the winnowing trays and mats, and on this wall hang also various implements of common use — hats, paddles, fish-traps, and so forth.

## Pagan Tribes of Borneo, V1

The gallery is reached from the ground by several ladders, each of which consists of a notched beam sloping at an angle of about 45[degree], and furnished with a slender hand-rail. The more carefully made ladder is fashioned from a single log, but the wood is so cut as to leave a hand-rail projecting forwards a few inches on either side of the notched gully or trough in which the feet are placed. From the foot of each ladder a row of logs, notched and roughly squared, and laid end to end, forms a foot-way to the water's edge. In wet weather such a foot-way is a necessity, because pigs, fowls, and dogs, and in some cases goats, run freely beneath and around the house, and churn the surface of the ground into a thick layer of slippery mire.

Here and there along the front of the house are open platforms raised to the level of the floor, on which the PADI is exposed to the sun to be dried before being husked.

Under the house, among the piles on which it is raised, such boats as are not in daily use are stored. Round about the house, and especially on the space between it and the brink of the river, are numerous PADI barns (Pl. 40). Each of these, the storehouse of the grain harvested by one family, is a large wooden bin about 10 feet square, raised on piles some 7 feet from the ground. Each pile carries just below the level of the floor of the bin a large disc of wood horizontally disposed, and perforated at its centre by the pile; this serves to prevent rats and mice gaining access to the bin. The shingle roof of the bin is like that of the house, but the two ends are filled by sloping surfaces running up under the gables. There are generally also a few fruit trees and tobacco plants in the space cleared round about the house; and in the space between it and the river are usually some rudely carved wooden figures, around which rites and ceremonies are performed from time to time.

Kayan villages generally consist of several, in some cases as many as seven or eight, such houses of various lengths, grouped closely together. The favourite situation for such a village is a peninsula formed by a sharp bend of the river.

Of the houses built by the other peoples, those of the Kenyahs very closely resemble those of the Kayans. The Kenyah village frequently consists of a single long house (and with the Sea Dayaks this is invariably the case), and it is in many cases perched on a high steep bank immediately above the river. Some of the Klemantans also build houses little if at all inferior to those of the Kayans, and very similar to them in general plan. But in this as in all other respects the Klemantans exhibit great diversities, some of their houses being built in a comparatively flimsy manner, light timber and even bamboos being used, and the roof being made of leaves. The houses of the Muruts are small and low, and of poor construction.

The Sea Dayak's house differs from that of the Kayan more than any of the others. The general plan is the same; but the place of the few massive piles is taken by a much larger number of slender piles, which pass up to the roof through the gallery and chambers. Of the gallery only a narrow passageway alongside the main partition-wall is kept clear of piles and other obstructions. The floor is of split bamboo covered with coarse mats. An open platform at the level of the floor runs along the whole length of the open side of the house. There are no PADI barns about the house, the PADI being kept in bins in the roofs. The roof itself is low, giving little head space. The gallery of the house makes an impression of lack of space, very different to that made by the long wide gallery of a Kayan or Kenyah house.

Although the more solidly built houses, such as those of the Kayans, would be habitable for many generations, few of them are inhabited for more than fifteen or twenty years, and some are used for much shorter periods only. For one reason or another the village community decides to build itself a new house on a different and sometimes distant site, though the new site is usually in the same tributary river, or, if on the main river, within a few miles of the old one. The most frequent causes of removal are, first, using up of the soil in the immediate neighbourhood of the village, for they do not cultivate the same patch more than three or four times at intervals of several years; secondly, the occurrence of a fatal epidemic; thirdly, any run of bad luck or succession of evil omens; fourthly, the burning of the house, whether accidentally or in the course of an attack by enemies.

On removing to a new site the planks and the best of the timber of a well-built house are usually towed along the river to the spot chosen, and used in the construction of the new house.

After the houses the most important of the material possessions of the people are their boats. Each family possesses at least one small boat capable of carrying seven or eight persons, and used chiefly for going to and from the PADI fields, but also for fishing and short journeys of all kinds. In addition to these the community possesses several larger boats used for longer journeys, and generally at least one long war-boat, capable of carrying 50 to 100 men. Each boat, even one of the largest size, is hollowed from a single log, the freeboard being

raised by lashing narrow planks to the edge of the hollowed log. In the middle of a large boat is a section, the freeboard of which is raised still higher, and which is covered by an arched roof of palm leaves. The boat is crossed at intervals of some three feet by seats formed of short planks, each supported at both ends by projections of the main timber, to which they are lashed with rattan. In travelling on the lower reaches of the rivers, the rowers sit two on each bench, side by side and facing the bow. On the upper reaches, where rapids abound, a deck is made by laying split bamboos along the length of the boat upon the benches, and the crew sits upon this deck in paddling, or stands upon it when poling the boat over rapids.

In addition to the clothes, houses, and boats, and the domestic animals mentioned above, and to the personal ornaments and weapons to be described in later chapters, the material possessions of the Kayans consist chiefly of baskets and mats.

The baskets are of various shapes and sizes, adapted to a variety of uses. The largest size holds about two bushels of PADI, and is chiefly used for transporting grain from the fields to the house (Fig. 4). It is almost cylindrical in shape, but rather wider at the upper end. Four strips of wood running down from near the upper edge project slightly below, forming short legs on which the basket stands. The upper end is closed by a detachable cap, which fits inside the upper lip of the basket. It is provided with a pair of shoulder straps, and a strap which is passed over the crown of the head. These straps are made of a single strip of tough beaten bark. One end of it is attached to the foot of the basket; a second attachment is made at the middle of the height, forming a loop for the one shoulder; the strip is then looped over to the corresponding point on the other side, forming the loop for the head, and then carried down to the foot of the basket on that side to form the loop for the other shoulder.

A smaller cylindrical basket, very neatly plaited of thin and very pliable strips of rattan, is used for carrying the few articles which a man takes with him in travelling — a little rice and tobacco, a spare waist cloth, a sleeping mat, perhaps a second mat of palm leaves used as a protection against rain, a roll of dried banana leaves for making cigarettes, perhaps a cap for wear in the house, and, not infrequently nowadays, a bright coloured handkerchief of Chinese silk. The lip of the basket is surrounded by a close set row of eyes through which a cord is passed. To this cord a net is attached, and is drawn together in the centre of the opening of the basket by a second cord, in order to confine its contents. This basket is provided with shoulder straps only.

In addition to these two principal baskets, each family has a number of smaller baskets of various shapes for storing their personal belongings, and for containing food in course of preparation (Fig. 5).

The mats are of many shapes and sizes. The largest are spread on the raised part of the floor, both of the gallery and of the private chambers, when a party sits down to eat or converse. Each individual has his own sleeping mat, and each family has a number of mats used for drying, husking, winnowing, and sieving the PADI.

The bamboo water-vessel consists of a section of the stem of the bamboo, closed at the lower end by the natural septum, the upper end having a lip or spout formed at the level of the succeeding septum. A short length of a branch remains projecting downwards to form a handle, by means of which the vessel can be conveniently suspended. These vessels are used also for carrying rice-spirit or BORAK; but this is stored in large jars of earthenware or china. The native jar of earthenware is ovoid in shape and holds about one gallon, but these are now largely superseded by jars made by the Chinese.

Each family possesses some dishes and platters of hardwood (Figs. 6 and 7), and generally a few china plates bought from traders; but a large leaf is the plate most commonly used.

Rice, the principal food, which forms the bulk of every meal, is boiled in an iron or brass pot with lip, handle, and lid, not unlike the old English cauldron; it has no legs, and is placed on a tripod of stones or suspended over the fire. This metal pot, which is obtained from the Chinese traders, has superseded the home-made pot of clay (Fig. 8) and the bamboo vessels in which the rice was cooked in former times. A larger wide stewpan is also used for cooking pork, vegetables, and fish. The Kayans smoke tobacco, which they cultivate in small quantities. It is generally smoked in the form of large cigarettes, the finely cut leaf being rolled in sheets of dried banana leaf. But it is also smoked in pipes, which are made in a variety of shapes, the bowl of hardwood, the stem of slender bamboo (Fig. 9). Sea Dayaks chew tobacco, but smoke little, being devoted to the chewing of betel nut.

In every house is a number of large brass gongs (TAWAK), which are used in various ceremonies and for signalling, and constitute also one of the best recognised standards of value and the most important form of currency. Besides these largest gongs, smaller ones of various shapes and sizes are kept and used on festive

occasions (Pl. 45). All these gongs are obtained through traders from Bruni, China, and Java.

Beside the gongs a Kayan house generally contains, as the common property of the whole household, several long narrow drums (Fig. 10). Each is a hollow cylinder of wood, constricted about its middle, open at one end, and closed at the other with a sheet of deer-skin. This is stretched by means of slips of rattan attached to its edges, and carried back to a stout rattan ring woven about the constricted middle of the drum; the skin is tightened by inserting wedges under this ring.

In most houses two or three small brass swivel guns may be seen in the gallery, and a small stock of powder for their service is usually kept by the chief. They are sometimes discharged to salute a distinguished visitor, and formerly played some small part in repelling attacks. The domestic animals of the Kayans are fowls, goats, pigs, and dogs. The latter live in the house, the others run free beneath and around the house.

The material possessions of the other peoples differ little from those of the Kayans. Almost every Sea Dayak possesses, and keeps stored at the back of his private chamber, one or more large vases. These were formerly imported from China, but are now made by the Chinese of the towns in Borneo. The commonest of the highly prized jars are of plain brown brightly glazed earthenware, standing about three feet in height on a flat bottom (Pl. 48); each is ornamented with a Chinese dragon moulded in relief (BENAGA), or some scroll designs which, though very varied, go by the name of RUSA (=deer) and NINGKA. A Dayak will give from 200 to 400 dollars for such a jar. Rarer and still more highly prized is a jar similar to these, but wider, very highly glazed, and bare of all ornament save some obscure markings. Eight perforated "ears" project just below the lip, and serve for the attachment of a wooden or cloth cover. This jar occurs in two varieties, a dark green and a very dark brown, which are known respectively as GUSI and BERGIAU, the latter being the more valuable. Other smaller and less valued jars are the PANTAR and the ALAS. The jars of the kinds mentioned above are valued largely on account of their age; probably all of them were imported from China and Siam, some of them no doubt centuries ago. Besides these old jars there are now to be found in most of the Sea Dayak houses many jars of modern Chinese manufacture, some of which are very skilful imitations of the old types; and though the Dayak is a connoisseur in these matters, and can usually distinguish the new from the old, he purchases willingly the cheap modern imitations of the old, because they are readily mistaken by the casual observer for the more valuable varieties (Pl. 47).

A few large vases of Chinese porcelain, usually covered with elaborate designs in colour, are to be found in most of the houses of the other peoples (Pl. 47).

## CHAPTER 5. The Social System

The Kayans constitute a well-defined and homogeneous tribe or people. Although their villages are scattered over a wide area, the Kayan people everywhere speak the same language and follow the same customs, have the same traditions, beliefs, rites, and ceremonies. Such small differences as they present from place to place are hardly greater than those obtaining between the villagers of adjoining English counties. Although communication between the widely separated branches of the people is very slight and infrequent, yet all are bound together by a common sentiment for the tribal name, reputation, tradition, and customs. The chiefs keep in mind and hand down from generation to generation the history of the migrations of the principal branches of the tribe, the names and genealogies of the principal chiefs, and important incidents affecting any one branch. At least fifteen sub-tribes of Kayans, each bearing a distinctive name, are recognised.[38] The word UMA, which appears in the names of each group, means village or settlement, and it seems probable that these fifteen sub-tribes represent fifteen original Kayan villages which at some remote period, before the tribe became so widely scattered, may have contained the whole Kayan population. At the present time the people of each sub-tribe occupy several villages, which in most cases, but not in all, are within the basin of one river.

In spite of the community of tribal sentiment, which leads Kayans always to take the part of Kayans, and prevents the outbreak of any serious quarrels between Kayan villages, there exist no formal bonds between the various sub-tribes and villages. Each village is absolutely independent of all others, save in so far as custom and caution prescribe that, before undertaking any important affair (such as a removal of the village or a warlike expedition), the chief will seek the advice, and, if necessary, the co-operation of the chiefs of neighbouring Kayan villages. The people of neighbouring villages, especially the families of the chiefs, are also bound together by many ties of kinship; for intermarriage is frequent.

As was said above, a Kayan village almost invariably consists of several long houses. Each house is ruled by a chief; but one such chief is recognised as the head-chief of the village.

The minor and purely domestic affairs of each house are settled by the house-chief, but all important matters of general interest are brought before the village-chief. In the former category fall disputes as to ownership of domestic animals and plants, questions of compensation for injury or loss of borrowed boats, nets, or other articles, of marriage and divorce, and minor personal injuries, moral or physical. The matters to be settled by the head-chief sitting in council with the subordinate chiefs are those affecting the whole village, questions of war and peace and of removal, disputes between houses, trials for murder or serious personal injuries.

The degree of authority of the chiefs and the nature and degree of the penalties imposed by them are prescribed in a general way by custom, though as regards the former much depends upon the personal qualities of each chief, and as regards the latter much is left to his discretion. The punishments imposed are generally fines, so many TAWAKS (gongs), PARANGS (swords) or spears, or other articles of personal property. On the whole the chief plays the part of an arbitrator and mediator, awarding compensation to the injured party, rather than that of a judge. In the case of offences against the whole house, a fine is imposed; and the articles of the required value are placed under the charge of the chief, who holds them on behalf of the community, and uses them in the making of payments or presents in return for services rendered to the whole community.

The chief also is responsible for the proper observation of the omens and for the regulation of MALAN (tabu) affecting the whole house; and, as we shall see, he takes the leading part in social ceremonies and in most of the religious rites collectively performed by the village. He is regarded by other chiefs as responsible for the behaviour of his people, and above all, in war he is responsible for both strategy and tactics and the general conduct of operations.

For the maintenance of his authority and the enforcement of his commands the chief relies upon the force of public opinion, which, so long as he is capable and just, will always support him, and will bring severe moral pressure to bear upon any member of the household who hesitates to submit.

In return for his labours on behalf of the household or village the Kayan chief gains little or nothing in the

shape of material reward. He may receive a little voluntary assistance in the cultivation of his field; in travelling by boat he is accorded the place of honour and ease in the middle of the boat, and he is not expected to help in its propulsion. His principal rewards are the social precedence and deference accorded him and the satisfaction found in the exercise of authority.

If the people of a house or village are gravely dissatisfied with the conduct of their chief, they will retire to their PADI-fields, building temporary houses there. If many take this course, a new long house will be built and a new chief elected to rule over it, while the old chief remains in the old house with a reduced following, sometimes consisting only of his near relatives.

The office of chief is rather elective than hereditary, but the operation of the elective principle is affected by a strong bias in favour of the most capable son of the late chief; so in practice a chief is generally succeeded by one of his sons. An elderly chief will sometimes voluntarily abdicate in favour of a son. If a chief dies, leaving no son of mature age, some elderly man of good standing and capacity will be elected to the chieftainship, generally by agreement arrived at by many informal discussions during the weeks following the death. If thereafter a son of the old chief showed himself a capable man as he grew up, he would be held to have a strong claim on the chieftainship at the next vacancy. If the new chief at his death left also a mature and capable son, there might be two claimants, each supported by a strong party; the issue of such a state of affairs would probably be the division of the house or village, by the departure of one claimant with his party to build a new village. In such a case the seceding party would carry away with them their share of the timbers of the old house, together with all their personal property.

The Kenyahs form a less homogeneous and clearly defined tribe than the Kayans; yet in the main their social organisation is very similar to that of the Kayans, although, as regards physical characters and language as well as some customs, they present closer affinities with other peoples than with the Kayans, especially with the Klemantans. The Kenyah tribe also comprises a number of named branches, though these are less clearly defined than the sub-tribes of the Kayan people. Each branch is generally named after the river on the banks of which its villages are situated, or were situated at some comparatively recent time of which the memory is preserved. In many cases a single village adopts the name of some tributary stream near the mouth of which it is situated, and the people speak of themselves by this name. Thus it seems clear that the named branches of the Kenyah tribe are nothing more than local groups formed in the course of the periodical migrations, and named after the localities they have occupied.[39]

The foregoing description of the relations of a Kayan chief to his people applies in the main to the Kenyah chief. But among the Kenyahs the position of the chief is one of greater authority and consideration than among the Kayans. The people voluntarily work for their chief both in his private and public capacities, obeying his commands cheerfully, and accepting his decisions with more deference than is accorded by the Kayans. The chief in return shows himself more generous and paternal towards his people, interesting himself more intimately in their individual affairs. Hence the Kenyah chief stands out more prominently as leader and representative of his people, and the cohesion of the whole community is stronger. The chief owes his great influence over his people in large measure to his training, for, while still a youth, the son or the nephew of a chief is accustomed to responsibility by being sent in charge of small bodies of followers upon missions to distant villages, to gather or convey information, or to investigate disturbing rumours. He is also frequently called upon to speak on public occasions, and thus early becomes a practised orator.

Among Klemantans, Muruts, and Sea Dayaks each house recognises a headman or chief; but he has little authority (more perhaps among the first of these peoples than among the other two). He acts as arbitrator in household disputes, but in too many cases his impartiality is not above suspicion, save where custom rigidly limits his preference.

Among both Kayans and Kenyahs three social strata are clearly distinguishable and are recognised by the people themselves in each village. The upper class is constituted by the family of the chief and his near relatives, his aunts and uncles, brothers, sisters, and cousins, and their children. These upper-class families are generally in easier circumstances than the others, thanks to the possession of property such as brass ware, valuable beads, caves in which the swift builds its edible nest, slaves, and a supply of all the other material possessions larger in quantity and superior in quality to those of the middle- and lower-class families.

The man of the upper class can generally be distinguished at a glance by his superior bearing and manners, by

the neatness and cleanliness of his person, his more valuable weapons, and personal ornaments, as well as by greater regularity of features. The woman of the upper class also exhibits to the eye similar marks of her superior birth and breeding. The tatuing of her skin is more finely executed, greater care is taken with the elongation of the lobe of the ear, so that the social status of the woman is indicated by the length of the lobe. Her dress and person are cleaner, and generally better cared for, and her skin is fairer than that of other women, owing no doubt to her having been less exposed to the sun.

The men of the upper class work in the PADI-fields and bear their share of all the labours of the village; but they are able to cultivate larger areas than others owing to their possession of slaves, who, although they are expected to grow a supply of PADI for their own use, assist in the cultivation of their master's fields. For the upper-class women, also, the labours of the field and the house are rendered less severe by the assistance of female slaves, although they bear a part both in the weeding of the fields, in the harvesting, and in the preparation of food in the house.

The chief's room, which is usually about twice as long as others, is usually in the middle of the house; and those of the other upper-class families, which also may be larger than the other rooms, adjoin it on either side.

In all social gatherings, and in the performance of public rites and ceremonies, the men of the upper class are accorded leading parts, and they usually group themselves about the chief. Social intercourse is freer and more intimate among the people of the upper class than between them and the rest of the household.

The upper class is relatively more numerous in the Kenyah than in the Kayan houses, and more clearly distinguishable by address and bearing.

The middle class comprises the majority of the people of a house in most cases. They may enjoy all the forms of property, though generally their possessions are of smaller extent and value, and they seldom possess slaves. Their voices carry less weight in public affairs; but among this class are generally a few men of exceptional capacity or experience whose advice and co-operation are specially valued by the chief. Among this class, too, are usually a few men in each house on whom devolve, often hereditarily, special duties implying special skill or knowledge, E.G. the working of iron at the forge, the making of boats, the catching of souls, the finding of camphor, the observation and determination of the seasons. All such special occupations are sources of profit, though only the last of these enables a man to dispense with the cultivation of PADI.

The lower class is made up of slaves captured in war and of their descendants, and for this reason its members are of very varied physical type. An unmarried slave of either sex lives with, and is treated almost as a member of, the family of his or her master, eating and in some cases sleeping in the family room. Slaves are allowed to marry, their children becoming the property of their masters. Some slave-families are allowed to acquire a room in the house, and they then begin to acquire a less dependent position; and though they still retain the status of slaves, and are spoken of as "slaves-outside-the-room," the master generally finds it impossible to command their services beyond a very limited extent, and in some cases will voluntarily resign his rights over the family. But in this case the family continues to belong to the lower class.

The members of each of these classes marry in nearly all cases within their own class. The marriages of the young people of the upper class are carefully regulated. Although they are allowed to choose their partners according to the inscrutable dictates of personal affinities, their choice is limited by their elders and the authority of the chief. Many of them marry members of neighbouring villages, while the other classes marry within their own village.

A youth of the upper class, becoming fond of some girl of the middle class, and not being allowed to marry her (although this is occasionally permitted), will live with her for a year or two. Then, when the time for his marriage arrives (it having perhaps been postponed for some years after being arranged, owing to evil omens, or to lack of means or of house accommodation), he may separate from his mistress, leaving in her care any children born of their union, and perhaps making over to her some property — as public opinion demands in such cases. She may and usually will marry subsequently a man of her own class, but the children born of her irregular union may claim and may be accorded some of the privileges of their father's class. In this way there is formed in most villages a class of persons of ambiguous status, debarred from full membership in the upper class by the bar-sinister. Such persons tend to become wholly identified with the upper or middle class according to the degrees of their personal merits.

Marriages are sometimes contracted between persons of the middle and slave classes. In the case of a young



man marrying a slave woman, the owners of the woman will endeavour to persuade him to live with her in their room, when he becomes a subordinate member of their household. If they succeed in this they will claim as their property half the children born to the couple. On the other hand, if the man insists on establishing himself in possession of a room, he may succeed in practically emancipating his wife, perhaps making some compensation to her owners in the shape of personal services or brass ware. In this case the children of the couple would be regarded as freeborn. It is generally possible for an energetic slave to buy his freedom.

Less frequent is the marriage of a slave man with a free woman of the middle class. In this case the man will generally manage to secure his emancipation and to establish himself as master of a room, and to merge himself in the middle class. In the case of marriage between two slaves, they continue to live in the rooms of their owners, spending by arrangement periods of two or three years alternately as members of the two households. The children born of such a slave-couple are divided as they grow up between the owners of their parents.

On the whole the slaves are treated with so much kindness and consideration that they have little to complain of, and most of them seem to have little desire to be freed. A capable slave may become the confidant and companion of his master, and in this way may attain a position of considerable influence in the village. A young slave is commonly addressed by his master and mistress as "My Child." A slave is seldom beaten or subjected to any punishment save scolding, and he bears his part freely in the life of the family, sharing in its labours and its recreations, its ill or its good fortunes. Nothing in the dress or appearance of the slave distinguishes him from the other members of the village.

#### The Family

Very few men have more than one wife. Occasionally a chief whose wife has borne him no children during some years of married life, or has found the labours of entertaining his guests beyond her strength, will with her consent, or even at her request, take a second younger wife. In such a case each wife has her own sleeping apartment within the chief's large chamber, and the younger wife is expected to defer to the older one, and to help her in the work of the house and of the field. The second wife would be chosen of rather lower social standing than the first wife, who in virtue of this fact maintains her ascendancy more easily. A third wife is probably unknown; public opinion does not easily condone a second wife, and would hardly tolerate a third. In spite of the presence of slave women in the houses, concubinage is not recognised or tolerated.

The choice of a wife is not restricted by the existence of any law or custom prescribing marriage without or within any defined group; that is to say, exogamous and endogamous groups do not exist. Incest is regarded very seriously, and the forbidden degrees of kinship are clearly defined. They are very similar to those recognised among ourselves. A man may under no circumstances marry or have sexual relations with his sister, mother, daughter, father's or mother's sister or half sister, his brother's or sister's daughter; and in the case of those women who stand to him in any of these relations in virtue of adoption, the prohibitions and severe penalties are if possible even more strictly enforced. First cousins may marry, but such marriages are not regarded with favour, and certain special ceremonies are necessitated; and it seems to be the general opinion that such marriages are not likely to prove happy. Many young men of the upper class marry girls of the same class belonging to neighbouring villages of their own people, and in some cases this choice falls on a girl of a village of some other tribe. A marriage of the latter kind is often encouraged by the chiefs and elder people, in order to strengthen or to restore friendly relations between the villages.

The initiative is taken in nearly all cases by the youth. He begins by paying attentions somewhat furtively to the girl who attracts his fancy. He will often be found passing the evening in her company in her parents' room. There he will display his skill with the KELURI, or the Jew's harp, or sing the favourite love-song of the people, varying the words to suit the occasion. If the girl looks with favour on his advances, she manages to make the fact known to him. Politeness demands that in any case he shall be supplied by the women with lighted cigarettes. If the girl wishes him to stay, she gives him a cigarette tied in a peculiar manner, namely by winding the strip which confines its sheath of dried banana leaf close to the narrow mouth-piece; whereas on all other occasions this strip is wound about the middle of the cigarette. The young man thus encouraged will repeat his visits. If his suit makes progress, he may hope that the fair one will draw out with a pair of brass tweezers the hairs of his eyebrows and lashes, while he reclines on his back with his head in her lap. If these hairs are very few, the girl will remark that some one else has been pulling them out, an imputation which he repudiates. Or he complains of a headache, and

she administers scalp-massage by winding tufts of hair about her knuckles and sharply tugging them. When the courtship has advanced to this stage, the girl may attract her suitor to the room by playing on the Jew's harp, with which she claims to be able to speak to him -- presumably the language of the heart. The youth thus encouraged may presume to remain beside his sweetheart till early morning, or to return to her side when the old people have retired. When the affair has reached this stage, it becomes necessary to secure the public recognition which constitutes the relation a formal betrothal. The man charges some elderly friend of either sex, in many cases his father or mother, to inform the chief of his desire. The latter expresses a surprise which is not always genuine; and, if the match is a suitable one, he contents himself with giving a little friendly advice. But if he is aware of any objections to the match he will point them out, and though he will seldom forbid it in direct terms, he will know how to cause the marriage to be postponed.

If the chief and parents favour the match, the young man presents a brass gong or a valuable bead to the girl's family as pledge of his sincerity. This is returned to him if for any reason beyond his control the match is broken off. The marriage may take place with very little delay; but during the interval between betrothal and marriage the omens are anxiously observed and consulted. All accidents affecting any members of the village are regarded as of evil omen, the more so the more nearly the betrothed parties are concerned in them. The cries of birds and deer are important; those heard about the house are likely to be bad omens, and it is sought to compensate for these by sending a man skilled in augury to seek good omens in the jungle, such as the whistle of the Trogon and of the spider-hunter, and the flight of the hawk from right to left high up in the sky. If the omens are persistently and predominantly bad, the marriage is put off for a year, and after the next harvest fresh omens are sought. The man is encouraged in the meantime to absent himself from the village, in the hope that he may form some other attachment. But if he remains true and favourable omens are obtained, the marriage is celebrated if possible at the close of the harvest. If the marriage takes place at any other time, the feast will be postponed to the end of the following harvest.[40] After the marriage the man lives with his wife in the room of his father-in-law for one, two, or at most three years. During this time he works in the fields of his father-in-law and generally helps in the support of the household, showing great deference towards his wife's parents. Before the end of the third year of marriage, the young couple will acquire for themselves a room in the house and village of the husband, in which they set up housekeeping on their own account. In addition to these personal services rendered to the parents of the bride, the man or his father and other relatives give to the girl's parents at the time of the marriage various articles which are valuable in proportion to the social standing of the parties, and which are generally appropriated by the girl's parents.[41]

Divorce is rare but not unknown among the Kayans. The principal grounds of divorce are misconduct, desertion, incompatibility of temper and family quarrels; or a couple may terminate their state of wedlock by mutual consent on payment of a moderate fine to the chief. Such separation by mutual consent is occasioned not infrequently by the sterility of the marriage, especially if the couple fails to obtain a child for adoption; the parties hope to procure offspring by taking new partners; for the desire for children and pride and joy in the possession of them are strongly felt by all. The husband of a sterile wife may leave the house for a long period, living in the jungle and visiting other houses, in the hope that his wife may divorce him on the ground of desertion, or give him ground for divorcing her. On discovery of misconduct on the woman's part the husband will usually divorce her; the man then retains all property accumulated since the marriage, and the children are divided between the parents. The co-respondent and respondent are fined by the chief, and half the amount of the fine goes to the injured husband. Misconduct on the part of the man must be flagrant before it constitutes a sufficient ground for his divorce by his wife. In this case the same rules are followed. Among the Kayans the divorce is not infrequently followed by a reconciliation brought about by the intervention of friends; the parties then come together again without further ceremony. There is little formality about the divorce procedure. In the main it takes the form of separation by mutual consent and the condonation of the irregularity by the community on the payment of a fine to the chief.

#### Adoption

Adoption is by no means uncommon. The desire for children, especially male children, is general and strong; but sterile marriages seem to be known among all the peoples and are common among the Kenyahs. When a woman has remained infertile for some years after her marriage, the couple usually seek to adopt one or more children. They generally prefer the child of a relative, but may take any child, even a captive or a slave child,

whose parents are willing to resign all rights in it. A child is often taken over from parents oppressed by poverty, in many cases some article of value or a supply of PADI being given in exchange. Not infrequently the parents wish to have the child returned to them when their affairs take a turn for the better, owing to a good harvest or some stroke of luck, and this is a frequent cause of dissensions. Usually the adopted child takes in every way the position of a child born to the parents.

Some of the Klemantans (Barawans and Lelaks in the Baram) practise a curious symbolic ceremony on the adoption of a child. When a couple has arranged to adopt a child, both man and wife observe for some weeks before the ceremony all the prohibitions usually observed during the later months of pregnancy. Many of these prohibitions may be described in general terms by saying that they imply abstention from every action that may suggest difficulty or delay in delivery; E.G. the hand must not be thrust into any narrow hole to pull anything out of it; no fixing of things with wooden pegs must be done; there must be no lingering on the threshold on entering or leaving a room. When the appointed day arrives, the woman sits in her room propped up and with a cloth round her, in the attitude commonly adopted during delivery. The child is pushed forward from behind between the woman's legs, and, if it is a young child, it is put to the breast and encouraged to suck. Later it receives a new name.

It is very difficult to obtain admission that a particular child has been adopted and is not the actual offspring of the parents; and this seems to be due, not so much to any desire to conceal the facts as to the completeness of the adoption, the parents coming to regard the child as so entirely their own that it is difficult to find words which will express the difference between the adopted child and the offspring. This is especially the case if the woman has actually suckled the child.

#### Proper Names

The child remains nameless during the first few years, and is spoken of as UKAT if a boy, OWING if a girl, both of which seem to be best translated as Thingumybob; among the Sea Dayaks ULAT (the little grub) is the name commonly used. It is felt that to give the child a name while its hold of life is still feeble is undesirable, because the name would tend to draw the attention of evil spirits to it. During its third or fourth year it is given a name at the same time as a number of other children of the house.[42] The name is chosen with much deliberation, the eldest son and daughter usually receiving the names of a grandfather and grandmother respectively. Male and female names are distinct. The name first given to any person is rarely carried through life; it is usually changed after any severe illness or serious accident, in order that the evil influences that have pursued him may fail to recognise him under the new name; thus the first or infant name of Tama Bulan was Lujah. After bearing it a few years he went through a serious illness, on account of which his name was changed to Wang. Among the Klemantans it is usual under these circumstances to name the child after some offensive object, E.G. TAI (dung), in order to render it inconspicuous, and thus withdraw it from the attention of malign powers. After the naming of a couple's first child, the parents are always addressed as father and mother of the child; E.G. if the child's name is OBONG, her father becomes known as TAMA OBONG, her mother as INAI OBONG, and their original names are disused and almost forgotten,[43] unless needed to distinguish the parents from other persons of the same name, when the old names are appended to the new; thus, Tama Obong Jau, if Jau was the original name of Tama Obong; and thus Tama Bulan received this name on the naming of his first child, Bulan (the moon), and when it is wished to distinguish him in conversation from other fathers of the moon he is called Tama Bulan Wang. If the eldest child OBONG dies, the father, Tama Obong Jau, becomes OYONG JAU; if one of his younger children dies, he becomes AKAM JAU; if his wife dies, he becomes ABAN JAU; if his brother died, he would be called YAT JAU; and if his sister, HAWAN JAU; and if two of these relatives are dead, these titles are used indifferently; but the deaths of wife and children are predominant over other occasions for the change of name. An elderly man who has no children receives the title LINGO, and a woman, the title APA prefixed to his or her former name. A widow is called BALU. The names of father and mother are never assumed by the children, and their deaths do not occasion any change of name, except the adoption of the title OYAU on the loss of the father, and ILUN on the loss of the mother. These titles would be used only until the man became a father. When a man becomes a grandfather his title is LAKI (E.G. LAKI JAU), and this title supersedes all others. A child addresses, and speaks of, his father as TAMAN, and his mother as INAI or TINAN, and all four grandparents as POI. The parent commonly addresses the child, even when adult, as ANAK, or uses his proper name. A father's brother is addressed as AMAI, but this title is used also as a term of respect in addressing any

older man not related in any degree, even though he be of a different tribe or race. They use the word INAI for aunt as well as for mother, and some have adopted the Malay term MA MANAKAN for aunt proper. The same is true of the words for nephew and niece — the Malay term ANAK MANAKAN being used for both.

The terms used to denote degrees of kinship are few, and are used in a very elastic manner. The term of widest connotation is PARIN IGAT, which is equivalent to our cousin used in the wider or Scotch sense; it is applied to all blood relatives of the same generation, and is sometimes used in a metaphorical sense much as we use the term brother. There are no words corresponding to our words son and daughter, ANAK meaning merely child of either sex. There are no words corresponding to brother and sister; both are spoken of as PARIN, but this word is often used as a title of endearment in addressing or speaking of a friend of either sex of the same social standing and age as the speaker. The children of the same parents speak of themselves collectively as PANAK; this term also is sometimes used loosely and metaphorically. A step-father is TAMAN DONG; father-in-law is TAMAN DIVAN; forefather is SIPUN, a term used of any male or female ancestor more remote than the grandparents; but these are merely descriptive and not terms of address. A man of the upper class not uncommonly has a favourite companion of the middle class, who accompanies him everywhere and renders him assistance and service, and shares his fortunes (FIDUS ACHATES in short); him he addresses as BAKIS, and the title is used reciprocally. A title reciprocally used by those who are very dear friends, especially by those who have enjoyed the favours of the same fair one, is TOYONG (or among the Sea Dayaks — IMPRIAN).

This list includes all the important Kayan terms used to denote personal relations and kinship, so far as we know; and we think it very improbable that any have escaped us. There seem to be no secret names, except in so far as names discarded on account of misfortune are not willingly recalled or communicated; but a child's name is seldom used, and adults also seem to avoid calling on one another by their proper names, especially when in the jungle, the title alone, such as OYONG, or ABAN being commonly used; apparently owing to some vaguely conceived risk of directing to the individual named the attentions of malevolent powers.[44]

The foregoing account of the social organisation of the Kayans applies equally well to the Kenyahs, except that some of the titles used are different. The Klemantans and Muruts, too, present few important differences except that the power of the chiefs is decidedly less, and the distinction of the social strata less clearly marked, and slaves are less numerous. The Sea Dayak social organisation is also similar in most of its features. The most important of the differences presented by it are the following: — Polygamy is not allowed, and occurs only illicitly. Both parties are fined when the facts are discovered. Divorce is very common and easily obtained; the marriage relation, being surrounded with much less solemnity, is more easily entered into and dissolved. Infidelity and mutual agreement are the common occasions of divorce. Either party can readily secure his or her freedom by payment of a small fine. There are both men and women who have married many times; a tenth husband or wife is not unknown; and a marriage may be dissolved within a week of its consummation.

The Sea Dayak, like all the other peoples, regards incest very seriously, and the forbidden degrees of kinship are well understood and very similar to those of Kayans.

A Sea Dayak village consists in almost every case of a single house, but such houses are generally grouped within easy reach of one another. Very few slaves are to be found in their houses, since the Ibans usually take the heads of all their conquered enemies rather than make slaves of them.

#### Inheritance of Property

At a man's death his property is divided between his widow and children. But in order to prevent the disputes, which often arise over the division of inheritance, an old man may divide his property before his death. The widow becomes the head of the room, though a married son or daughter or several unmarried children may share it with her. She inherits all or most of the household utensils. Such things as gongs and other brass ware, weapons, war-coats, and boats, are divided equally among the sons, the eldest perhaps getting a little more than the others. The girls divide the old beads, cloth, bead-boxes, and various trifles. The male slaves go to the sons, the female slaves to the daughters. Bird's nest caves and bee trees might be divided or shared among all the children.

It happens not infrequently that one son or daughter, remaining unmarried, continues to live in the household of the parents and to look after them in their old age. To such a one some valuable article, such as a string of old beads or costly jar, is usually bequeathed.

Among the Sea Dayaks the old jars, which constitute the chief part of a man's wealth, are distributed among both sons and daughters; if the jars are too few for equal distribution, they are jointly owned until one can buy out

the shares of his co-owners.

The members of a Kayan household are bound together, not merely by their material circumstances, such as their shelter under a common roof and their participation in common labours, and not merely by the moral bonds such as kinship and their allegiance to one chief and loyalty to one another, but also by more subtle ties, of which the most important is their sharing in the protection and warning afforded to the whole house by the omen-birds or by the higher powers served by these. For omens are observed for the whole household, and hold good only for those who live under the one roof. This spiritual unity of the household is jealously guarded. Occasionally one family may wish for some reason, such as bad dreams or much sickness, to withdraw from the house. If the rest of the household is unwilling to remove to a new house, they will oppose such withdrawal, and, if the man insists on separating, a fine is imposed on him, and he is compelled to leave undisturbed the roof and all the main structure of his section of the house; though the room would be left unoccupied. Conversely Kayans are very unwilling to admit any family to become members of the household. They never or seldom add sections to a house which has once been completed; and young married couples must live in their parents' rooms, until the whole household removes and builds a new house. Occasionally a remnant of a household which has been broken up by the attack of enemies is sheltered by a friendly house; but the newcomers are lodged in the gallery only until the time comes for building a new house, when they may be allowed to build rooms for themselves, and to become incorporated in the household. Another plan sometimes adopted is to build a small house for the newcomers closely adjoining the main house, but joined to it only by an open platform.

Appendix to Chapter V

Tables showing Kinship of the Kenyahs of Long Tikan (Tama Bulan's house) in the Baram District of Sarawak.

We have made out tables showing the kinship of the inhabitants of several Kenyah long houses and of one Sea Dayak house, following the example and method of Dr. W. H. R. Rivers. These tables have not revealed to us indications of any peculiar system of kinship; but we think it worth while to reproduce one of them as an appendix to the foregoing chapter. The table includes all the inhabitants of the house living in the year 1899, as well as those deceased members of whom we are able to obtain trustworthy information. The arrangement is by door or room, but since on marriage some shifting from one room to another takes place, some individuals appear under two doors.

In these tables the names of males are printed in ordinary type, those of females in italics; and the following signs are used: —

= for married to.

= indicates the children of a married couple.

implies that the individual below whose name it occurs reached adult life, but died without issue.

implies a child dead at early age, sex and name unknown.

[male] implies male child not yet named.

[female] implies female child not yet named

? individual of unknown name.

(1) Sidi Karang's Door.

Sidi Karang = SIDI PENG (A Long Paku Kenyah). Baiai Gau = ULAU. x

Other Members of the Room.

Tama Aping Layong = BALU BUON. Lutang (nephew of Sidi Karang). SUKUN.

Mang = BORU TELLUN. Luat = ? Lim. o Ukang. o Lesun = BALU ULAN. Usun. Luyok = OYONG  
TURING. (See Door 6.) Linjau. o ITANG WING = Lara Wan.

(2) Ajong's Door.

Mawa Ontong (Long Belukun Kenyah) = ? (Long Belukun Kenyah woman). BALU LARA. Anjong =  
NGINO (Long Tikan). [male] [female] x x

(3) Mawa Jungan's Door.

Mawa Hungan (see Imoh's door) = MAWA UJONG. x x x x x Weak-minded. Kading. [female]

(4) Imoh's Door.

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Jilo = ? Imoh = TINA APING POYONG, (sister of NGINO, see Door 2) formerly = Tama Aping Lalo. (see Door 5). Lirim.

(5) Pallavo's Door.

Maga = ?

PALLAVO (unmarried at 60).

Tugan (weak-minded slave). o

Tama Aping Lalo = (1st wife) TINA APING POYONG (see Door 4) = (2nd wife) USUN (Likan Kenyah).

Anie Tapa (weak-minded) = ? Tigiling (weak-minded).

(6) Oyong Turing's Door.

Seling = ? Sidi Ontong = ? OYONG LUJOK = Oyong Turing. x Maga.

BALU ATING = ? Laro Libo (Long Palutan Kenyah) = LARA ULAU. ASONG. Sapo. Lalo. LUNGA. USUN. SINGIM. x x x x

(7) Balu Kran's Door.

Lingan (a Likan Kenyah) = ? Tama Aping Mawa = BALU KRAN (see Door 8). LAUONG. Siggau. Oyu Apa. [female] weak-minded.

(8) Balu Uding's Door.

Sawa Taja = ? BALU KRAN. BALU UDING = Mawa Imang. Oyu Suo. Luat. o

KENING (unmarried sister of Mawa Imang).

(9) Aban Moun's Door.

Kamang. Aban Moun = TELUN. Tama Sook Bilong = TINA SOOK BUNGAN. Sook (weak-minded). x unnamed. x unnamed. Tama Aping Salo = ? (Long Belukun Kenyah). x unnamed. x unnamed. TINA APING ODING.

(10) Aban Magi's Door.

Aban Magi (see Door 13) = TINA APING KRAN. Anie Liran.

(11) Lara Wan's Door.

Mawa Liva = (1st wife) TINA WAN = (2nd wife) UTAN URING Lara Wan = LARA LANAN (Long Paku). Jalong. Katan. JULUT. Jawing. Kuleh. Balu Mening. o

(12) Tama An Lahing's Door.

Batan = TINA LAHING. Tama an Lahing = TINA AN PIKA. ODING = Balari. x x ULAU. SILALANG. x BALU TATAN = Wan Tula (son of Balaban). Tago. Ballan. x KENING. Tama Owing Laang = NOWING UBONG (daughter of Aban Imang, an Uma Poh Kayan). MENING. MUJAN. x

(13) Oyu Irang's Door.

Sorang (Long Tikan) = SINJAI (Long Tikan) (sister of Aban Magi, see Door 10; and Lara Libo, see Door 6). x x Oyu Irang. Pakat. Kupit.

Other members in the Room.

BALU TUBONG (sister of Sorang) = ? (a Long Tikan man).

ABING URAI (sister of Balu Tubong) = Aban Madan (Long Paku).

(14) Balu Usan's Door.

BALU USAN (Long Palutan) = Aban Siliwa (Long Palutan). x Oyu Sijau.

BALU MENO (niece of Balu Usan) = Aban Meggang (Long Peku). Lirong. o ULAN. [female]

(15) Balu Buah's Door.

Tegging = BALU MUJAN. BALU BUAH = Lara Lalu (Long Belukun Kenyah). x x x x UTAN URING. Abing Liran = LOONG LAKING. UTAI USUN. BAYIN. Apa. Baja. [female] [female]

(16) Oyong Kalang's Door.

Oyong Kalang (Long Palutan Kenyah) = OYONG NONG (Long Palutan Kenyah). x x Sago = ? INO. Angin. Ngau. Uya.

(17) Sidi Jau's Door.

## Pagan Tribes of Borneo, V1

Tama Owing Lawai (Lepu Tau) = TINA OWING KLING (sister of Tama Bulan Wang). Sidi Jau = PAYAH LAH (Uma Poh Kayan). Kuleh. Libut. Balari = UDING. x x

Other People in the Room.

TINA APING UDING (Long Palutan) = Tama Aping Toloi (Long Tikan). POYONG. ULAU. LOGAN.

BALA KEYONG = Aban Batu. Oyu Baung.

Oyu Lalu = ? LUJOK.

Aban Jok (Murut x Kayan).

KANGIN (sister to Mang, see Door 1).

Aban Oyu (Murut) = BALU MONG.

(18) Aban Tingan's Door.

Aban Langat (Punan) = TINA OYU (Punan). Aban Tingan = BELVIUN (2nd wife). Kalang. Paran. MUJAN.

x

Brothers. Tama Lim Balari = ? Balari. Livang. Laki Ludop (see Door 19) = OAN BUNGAN (Long Belukun). Tama Bulan (see Door 19). Aban Tingan = PAYA (1st wife, daughter of Paran Libut, his 1st cousin). Wan. LAN = Balan (Long Belukun Kenyah) Aping. o JULAN. Madang. Tina Owing Kling (see Door 17).

Slaves.

Aban Muda (Murut) = NUIING LABAI Nawam. URAI. SUAI. Nurang.

Abo = BALU VANG. Oyu Biti.

Jipong. [female]

Oan Igan, child of Mapit (Long Palutan), brother of Jilo (see Imoh's room).

Apoi Lujah } brothers.

ULAU (Kalabit).

Padan.

(19) Tama Bulan's Door.

Laki Ludop = BUNGAN (see Door 18). Tama Bulan Wang = (1st wife) PENG = (2nd wife) PAYAH WAN (Uma Poh Kayan). BULAN = Luja (Uma Plian Kayan). Balari and Livang (1st cousins of Tama Bulan, adopted by him as sons). OBONG = Wan (son of Aban Tingan her 1st cousin). LEVAN. Linjau.

## CHAPTER 6. Agriculture

For all the peoples of the interior of Borneo, the Punans and Malanaus excepted, the rice grown by themselves is the principal food—stuff. Throughout the year, except during the few weeks when the jungle fruit is most abundant, rice forms the bulk of every meal. In years of bad harvests, when the supply is deficient, the place of rice has to be filled as well as may be with wild sago, cultivated maize, tapioca, and sweet potatoes. All these are used, and the last three, as well as pumpkins, bananas, cucumbers, millet, pineapples, chilis, are regularly grown in small quantities by most of the peoples. But all these together are regarded as making but a poor substitute for rice. The cultivator has to contend with many difficulties, for in the moist hot climate weeds grow apace, and the fields, being closely surrounded by virgin forest, are liable to the attacks of pests of many kinds. Hence the processes by which the annual crop of PADI is obtained demand the best efforts and care of all the people of each village. The plough is unknown save to the Dusuns, a branch of the Murut people in North Borneo, who have learnt its use from Chinese immigrants. The Kalabits and some of the coastwise Klemantans who live in alluvial areas have learnt, probably through intercourse with the Philippine Islanders or the inhabitants of Indo-China, to prepare the land for the PADI seed by leading buffaloes to and fro across it while it lies covered with water. The Kalabits lead the water into their fields from the streams descending from the hills.

With these exceptions the preparation of the land is everywhere very crude, consisting in the felling of the timber and undergrowth, and in burning it as completely as possible, so that its ashes enrich the soil. After a single crop has been grown and gathered on land so cleared, the weeds grow up very thickly, and there is, of course, in the following year no possibility of repeating the dressing of wood ashes in the same way. Hence it is the universal practice to allow the land to lie fallow for at least two years, after a single crop has been raised, while crops are raised from other lands. During the fallow period the jungle grows up so rapidly and thickly that by the third year the weeds have almost died out, choked by the larger growths. The same land is then prepared again by felling the young jungle and burning it as before, and a crop is again raised from it. When a piece of land has been prepared and cropped in this way some three or four times, at intervals of two, three, or four years, the crop obtainable from it is so inferior in quantity that the people usually undertake the severe labour of felling and burning a patch of virgin forest, rather than continue to make use of the old areas. In this way a large village uses up in the course of some twelve or fifteen years all the land suitable for cultivation within a convenient distance, I.E. within a radius of some three miles. When this state of affairs results, the village is moved to a new site, chosen chiefly with an eye to the abundance of land suitable for the cultivation of the PADI crop. After ten or more years the villagers will return, and the house or houses will be reconstructed on the old site or one adjacent to it, if no circumstances arise to tempt them to migrate to a more distant country, and if the course of their life on the old site has run smoothly, without misfortunes such as much sickness, conflagrations, or serious attacks by other villages. After this interval the land is regarded as being almost as good as the virgin forest land, and has the advantage that the jungle on it can be more easily felled. But since no crop equals that obtainable from virgin soil, it is customary to include at least a small area of it in the operations of each year.

Each family cultivates its own patch of land, selecting it by arrangement with other families, and works as large an area as the strength and number of the roomhold permits. A hillside sloping down to the bank of a river or navigable stream is considered the choicest area for cultivation, partly because of the efficient drainage, partly because the felling is easier on the slope, and because the stream affords easy access to the field.

When an area has been chosen, the men of the roomhold first cut down the undergrowth of a V-shaped area, whose apex points up the hill, and whose base lies on the river bank. This done, they call in the help of other men of the house, usually relatives who are engaged in preparing adjacent areas, and all set to work to fell the large trees. In the clearing of virgin forest, when very large trees, many of which have at their bases immense buttresses, have to be felled, a platform of light poles is built around each of these giants to the height of about 15 feet. Two men standing upon this rude platform on opposite sides of the stem attack it with their small springy-hafted axes (Fig. 11) above the level of the buttresses (Pl. 55). One man cuts a deep notch on the side



facing up the hill, the other cuts a similar notch about a foot lower down on the opposite side, each cutting almost to the centre of the stem. This operation is accomplished in a surprisingly short time, perhaps thirty minutes in the case of a stem two to three feet in diameter. When all the large trees within the V-shaped area have been cut in this way, all the workers and any women, children, or dogs who may be present are called out of the patch, and one or two big trees, carefully selected to form the apex of the phalanx, are then cut so as to fall down the hill.[45] In their fall these giants throw down the trees standing immediately below them on the hillside; these, falling in turn against their neighbours, bring them down. And so, like an avalanche of widening sweep, the huge disturbance propagates itself with a thunderous roar and increasing momentum downwards over the whole of the prepared area; while puny man looks on at the awful work of his hand and brain not unmoved, but dancing and shouting in wild triumphant delight.

The fallen timber must now lie some weeks before it can be burnt. This period is mainly devoted to making and repairing the implements to be used in cultivating, harvesting, and storing the crop, and also in sowing at the earliest possible moment small patches of early or rapidly growing PADI together with a little maize, sugar-cane, some Sweet potatoes, and tapioca. The patches thus sown generally lie adjacent to one another. If the weather is fine, the fallen timber becomes dry enough to burn well after one month. If much rain falls it is necessary to wait longer in the hope of drier weather. Choosing a windy day, they set fire to all the adjacent patches after shouting out warnings to all persons in the fields. While the burning goes on, the men "whistle for the wind," or rather blow for it, rattling their tongues in their mouths. Some of the older men make lengthy orations shouted into the air, adjuring the wind to blow strongly and so fan the fire. The fire, if successful, burns furiously for a few hours and then smoulders for some days, after which little of the timber remains but ashes and the charred stumps of the bigger trees. If the burning is very incomplete, it is necessary to make stacks of the lighter timbers that remain, and to fire these again. As soon as the ashes are cool, sowing begins. Men and women work together; the men go in front making holes with wooden dibbles about six inches apart; the women follow, carrying hung round the neck small baskets of PADI seed (Fig. 12), which they throw into the holes, three or four seeds to each hole. No care is taken to fill in the holes with earth. By this time the relatively dry season, which lasts only some two months, is at an end, and copious rains cause the seed to shoot above the ground a few days after the sowing. Several varieties of PADI are in common use, some more suitable for the hillsides, some for the marshy lands. On any one patch three or four kinds are usually sown according to the elevation and slope of the part of the area. Since the rates of growth of the several kinds are different, the sowings are so timed that the whole area ripens as nearly as possible at the same moment, in order that the birds and other pests may not have the opportunity of turning their whole force upon the several parts in turn. The men now build on each patch a small hut, which is occupied by most of the able-bodied members of the roomhold until harvest is completed, some fourteen to twenty weeks after the sowing of the PADI, according to the variety of grain sown. They erect contrivances for scaring away the birds; they stick bamboos about eight feet in length upright in the ground every 20 to 30 yards. Between the upper ends of these, rattans are tied, connecting together all the bamboos on each area of about one acre. The field of one roomhold is generally about four acres in extent; there will thus be four groups of bamboos, each of which can be agitated by pulling on a single rattan. From each such group a rattan passes to the hut, and some person, generally a woman or child, is told off to tug at these rattans in turn at short intervals. Upon the rattans between the bamboos are hung various articles calculated to make a noise or to flap to and fro when the system is set in motion. Sometimes the rattan by which the system of poles is set in movement is tied to the upper end of a tall sapling, one end of which is thrust deeply into the mud of the floor of the river. The current then keeps the sapling and with it the system of bamboos swaying and jerking to and fro. The Kayans admit that they have learnt this last "dodge" from the Klemantans. The watcher remains in the hut all day long, while his companions are at work in the field; he varies the monotony of his task by shouting and beating with a pair of mallets on a hollow wooden cylinder. The watcher is relieved from time to time, but the watch is maintained continuously day and night from the time that the corn is about two feet above the ground until it is all gathered in. In this way they strive with partial success to keep off the wild pigs, monkeys, deer, and, as the corn ripens, the rice-sparrow (MUNIA).

When the hut and the pest-scaring system have been erected, the men proceed to provide further protection against wild pig and deer by running a rude fence round a number of closely adjacent patches of growing corn. The fence, some three to four feet high, is made by lashing to poles thrust vertically into the ground and to

convenient trees and stumps, bamboos or saplings as horizontal bars, five or six in vertical row. When this is completed the men take no further part until the harvest, except perhaps to lend a hand occasionally with the weeding. This is the time generally chosen by them for long excursions into the jungle in search of rattans, rubber, camphor, and for warlike expeditions or the paying of distant visits.

It is the duty of the women to prevent the PADI being choked by weeds. The women of each room will go over each patch completely at least twice, at an interval of about one month, hoeing down the weeds with a short-handled hoe; the hoe consists of a flat blade projecting at right angles from the iron haft (Fig. 13). The latter is bent downwards at a right angle just above the blade, in a plane perpendicular to that of the blade, and its other end is prolonged by a short wooden handle, into the end of which it is thrust. The woman stoops to the work, hoeing carefully round each PADI plant, by holding the hoe in the right hand and striking the blade downwards and towards her toes with a dragging action. In working over the patch in this careful fashion some three weeks are consumed. In the intervals the women gather the small crops of early PADI, pumpkin, cucumbers, and so forth, spending several weeks together on the farm, sleeping in the hut. In a good season this is the happiest time of the year; both men and women take the keenest interest and pleasure in the growth of the crop.

During the time when the grain is formed but not yet ripe, the people live upon the green corn, which they prepare by gathering the heads and beating them flat. These are not cooked, but merely dried in the sun, and though they need much mastication they are considered a delicacy.

During the time of the ripening of the corn a spirit of gaiety and joyful anticipation prevails. It is a favourite time for courtship, and many marriages are arranged.

The harvest is the most important event of the year. Men, women, and children, all take part. The rice-sparrows congregate in thousands as the grain begins to ripen, and the noisy efforts of the people fail to keep them at a distance. Therefore the people walk through the crop gathering all ripe ears. The operation is performed with a small rude knife-blade mounted in a wooden handle along its whole length (Figs. 14, 15). This is held in the hollow of the right hand, the ends of a short cross bar projecting between the first and second fingers and between thumb and first finger. The thumb seizes and presses the head of each blade of corn against the edge of the knife. The ears thus cropped are thrown into a basket slung round the neck. As soon as a large basket has been filled by the reapers, its contents are spread out on mats on a platform before the hut. After an exposure of two or three days, the grain is separated from the ears by stamping upon them with bare feet. The separated grain passes through the meshes of the coarse mat on to a finer mat beneath. The grain is then further dried by exposure to the sun. When the whole crop has been gathered, threshed, and dried in this way, it is transported in the large shoulder baskets amid much rejoicing and merry-making to the PADI barns adjoining the house, and the harvest festival begins.

The elaborate operations on the BADI FARM that we have described might seem to a materialist to be sufficient to secure a good harvest; but this is not the view taken by the Kayans, or any other of the cultivators of Borneo. In their opinion all these material labours would be of little avail if not supplemented at every stage by the minute observance of a variety of rites. The PADI has life or soul, or vitality, and is subject to sickness and to many vaguely conceived influences, both good and bad.

#### Determination of the Seasons

The determination of the time for sowing the seed is a matter of so great importance that in each village this duty is entrusted to a man who makes it his profession to observe the signs of the seasons. This work is so exacting that he is not expected to cultivate a crop of PADI for himself and family, but is furnished with all the PADI he needs by contributions from all the other members of the village.

It is essential to determine the approach of the short dry season, in order that in the course of it the timber may be felled and burned. In Borneo, lying as it does upon the equator, the revolution of the year is marked by no very striking changes of weather, temperature, or of vegetation. In fact, the only constant and striking evidences of the passage of the months are the alternations of the north-east and the south-west monsoons. The former blows from October to March, the latter from April to September, the transitions being marked by variable winds. The relatively dry season sets in with the south-west monsoon, and lasts about two months; but in some years the rainfall during this season is hardly less abundant than during the rest of the year.

The "clerk of the weather" (he has no official title, though the great importance of his function secures him general respect) has no knowledge of the number of days in the year, and does not count their passage. He is

aware that the lunar month has twenty-eight days, but he knows that the dry season does not recur after any given number of completed months, and therefore keeps no record of the lunar months. He relies almost entirely upon observation of the slight changes of the sun's altitude. His observations are made by the help of an instrument closely resembling the ancient Greek gnomon, known as TUKAR DO or ASO DO (Pl. 60).

A straight cylindrical pole of hardwood is fixed vertically in the ground; it is carefully adjusted with the aid of plumb lines, and the possibility of its sinking deeper into the earth is prevented by passing its lower end through a hole in a board laid horizontally on the ground, its surface flush with the surface of the ground which is carefully smoothed. The pole is provided with a shoulder which rests upon this board. The upper end of the pole is generally carved in the form of a human figure. The carving may be very elaborate, or the figure may be indicated only by a few notches. The length of the pole from the collar to its upper extremity is made equal to the span from tip to tip of outstretched arms of its maker, plus the length of his span from tip of the thumb to that of the first finger. This pole (ASO DO) stands on a cleared space before or behind the house, and is surrounded by a strong fence; the area within the fence, some three or four yards in diameter, being made as level and smooth as possible. The clerk of the weather has a neatly worked flat stick, on which lengths are marked off by notches; these lengths are measured by laying the stick along the radial side of the left arm, the butt end against the anterior fold of the armpit. A notch is then cut at each of the following positions: one notch about one inch from the butt end, a second opposite the middle of the upper arm, one opposite the elbow, one opposite the bend of the wrist, one at the first interphalangeal joint, one at the finger-tip. The other side of the rod bears a larger number of notches, of which the most distal marks the greatest length of the mid-day shadow, the next one the length of the mid-day shadow three days after it has begun to shorten, the next the length of the shadow after three more days' shortening, and so on. The mid-day shadow is, of course, the minimal length reached in the course of the day, and the marks denoting the changes in length of the shadow are arrived at, purely empirically, by marking off the length of the mid-day shadow every three days.

The clerk of the weather measures the shadow of the pole at mid-day whenever the sun is unclouded. As the shadow grows shorter after reaching its maximal length, he observes it with special care, and announces to the village that the time for preparing the land is near at hand. When the shadow reaches the notch made opposite the middle of the arm, the best time for sowing the grain is considered to have arrived; the land is therefore cleared, and made ready before this time arrives. Sowing at times when the shadow reaches other notches is held to involve various disadvantages, such as liability to more than the usual number of pests — monkeys, insects, rats, or sparrows. In the case of each successful harvest, the date of the sowing is recorded by driving a peg of ironwood into the ground at the point denoting the length of the mid-day shadow at that date. The weather prophet has other marks and notches whose meaning is known only to himself; his procedures are surrounded with mystery and kept something of a secret, even from the chief as well as from all the rest of the village, and his advice is always followed.

The method of observing the sun described above is universal among the Kenyahs, but some of the Kayans practise a different method. A hole is made in the roof of the weather-prophet's chamber in the long-house, and the altitude of the mid-day sun and its direction, north or south of the meridian, are observed by measuring along a plank fixed on the floor the distance of the patch of sunlight (falling through the hole on to the plank) from the point vertically below the hole. The horizontal position of the plank is secured by placing upon it smooth spherical stones and noting any inclination to roll. The sunbeam which enters this hole is called KLEPUT TOH (=the blow-pipe of the spirit).

Some of the Klemantans practise a third method to determine when the time for sowing is at hand, using a bamboo some feet in length which bears a mark at a level which is empirically determined. The bamboo is filled with water while in the vertical position. It is then tilted till it points towards a certain star, when of course some water escapes. After it has been restored to the vertical, the level of the surface of the remaining water is noted. The coincidence of this level with the mark mentioned above indicates that the time for sowing is come.

The Sea Dayaks are guided by the observation of the position of the Pleiades.

The appropriate season having been determined, it is necessary to secure good omens before the preparation of the land can be begun. A pig and a fowl having been sacrificed in the usual way, and their blood sprinkled upon the wooden figures before the house,[46] two men are sent out in a boat, and where they first see a spider-hunter they land on the bank and go through the customary procedures. The calls and appearances of

various birds and of the MUNTJAC are of chief importance. Some of these are good, some bad in various degrees. When a preponderance of favourable omens has been observed, the men return to the house to announce their success. They will wait two whole days if necessary to secure a favourable result. During their absence a strict MALAN or LALI (tabu) lies upon the house; no stranger may enter it, and the people sit quietly in the house performing only the most necessary tasks. The announcement of the nature of the omens observed is made to the chief in the presence of a deeply interested throng of both sexes. If the omens observed are considered to be bad, or of doubtful import, the men go out for a second period; but if they are favourable, the women of each room perform the private rites over their stores of seed PADI, which are kept in their rooms. After the pros and cons have been fully discussed, the chief names the day for the beginning of the clearing operations.

At the beginning of the sowing the house is again subject to MALAN for one day. During the growth of the PADI various charms and superstitious practices are brought into use to promote its growth and health, and to keep the pests from it. The PADI charms are a miscellaneous collection or bundle of small articles, such as curious pebbles and bits of wood, pigs' tusks of unusual size or shape, beads, feathers, crystals of quartz. Kayans as a rule object to pebbles and stones as charms. Such charms are generally acquired in the first instance through indications afforded by dreams, and are handed down from mother to daughter. Such charms contained in a basket are usually kept in a PADI barn, from which they are taken to the field by the woman and waved over it, usually with a live fowl in the hand, while she addresses the PADI seed in some such terms as the following: "May you have a good stem and a good top, let all parts of you grow in harmony, etc. etc." Then she rapidly repeats a long customary formula of exhortation to the pests, saying, "O rats, run away down river, don't trouble us; O sparrows and noxious insects, go feed on the PADI of the people down river." If the pests are very persistent, the woman may kill a fowl and scatter its blood over the growing PADI, while she charges the pests to disappear, and calls upon LAKI IVONG (the god of harvests) to drive them out.

Women alone will gather the first ears of the crop. If they encounter on their way to the fields any one of the following creatures, they must at once return home, and stay there a day and a night, on pain of illness or early death: certain snakes, spiders, centipedes, millipedes, and birds of two species, JERUIT and BUBUT (a cuckoo). Or again, if the shoulder straps of their large baskets should break on the way, if a stump should fall against them, or the note of the spider-hunter be heard, or if a woman strikes her foot by accident against any object, the party must return as before.

It will be clear from the foregoing account that the women play the principal part in the rites and actual operations of the PADI culture; the men only being called in to clear the ground and to assist in some of the later stages. The women select and keep the seed grain, and they are the repositories of most of the lore connected with it. It seems to be felt that they have a natural affinity to the fruitful grain, which they speak of as becoming pregnant. Women sometimes sleep out in the PADI fields while the crop is growing, probably for the purpose of increasing their own fertility or that of the PADI; but they are very reticent on this matter.

#### The Harvest Festival

When the crop is all gathered in, the house is MALAN to all outsiders for some ten days, during which the grain is transported from the fields to the village and stored in the PADI barns. When this process is completed or well advanced, the festival begins with the preparation of the seed grain for the following season. Some of the best of the new grain is carefully selected by the women of each room, enough for the sowing of the next season. This is mixed with a small quantity of the seed grain of the foregoing seasons which has been carefully preserved for this purpose in a special basket. The basket contains grains of PADI from good harvests of many previous years. This is supposed to have been done from the earliest time of PADI planting, so that the basket contains some of the original stock of seed, or at least the virtue of it leavening the whole. This basket is never emptied, but a pinch of the old PADI is mixed in with the new, and then a handful of the mixture added to the old stock. The idea here seems to be that the old grain, preserving continuity generation after generation with the original seed PADI of mythical origin,[47] ensures the presence in the grain of the soul or spirit or vital principle of PADI. While mixing the old with the new seed grain, the woman calls on the soul of the PADI to cause the seed to be fruitful and to grow vigorously, and to favour her own fertility. For the whole festival is a celebration or cult of the principle of fertility and vitality — that of the women no less than that of the PADI.[48]

The women who have been delivered of children during the past year will make a number of toys, consisting of plaited work, in the shapes of various animals filled with boiled rice (Fig. 16). These they throw to the children

of the house, who scramble for them in the gallery. This seems to be of the nature of a thank-offering.

At this time also another curious custom is observed. Four water beetles, of the kind that skates on the surface of the still water, are caught on the river and placed on water in a large gong. Some old man specially wise in this matter watches the beetles, calling to them to direct their movements. The people crowd round deeply interested, while the old man interprets the movements of the beetles as forecasting good or ill luck with the crops of the following season, and invokes the good-will of Laki Ivong. Laki Ivong is asked to bring the soul of the PADI to their homes. Juice from a sugarcane is poured upon the water, and the women drink the water, while the beetles are carefully returned to the river. The beetles carry the messages to Laki Ivong.

When these observances have been duly honoured, there begins a scene of boisterous fun. The women make pads of the boiled sticky new rice, and cover it with soot from their cooking vessels. With these they approach the men and dab the pads upon their faces and bodies, leaving sooty marks that are not easily removed. The men thus challenged give chase, and attempt to get possession of the rice pads and to return the polite attention. For a short space of time a certain license prevails among the young people; and irregularities, even on the part of married people, which would be gravely reprobated at all other times, are looked upon very much less seriously. It is, in fact, the annual carnival. Each roomhold has prepared a stock of BURAK from the new rice, and this now circulates freely among both men and women, and large meals of rice and pork are usually eaten. All join in dancing, some of the women dressed like men, some carrying PADI-pestles; at one moment all form a long line marching up and down the gallery in step to the strains of the KELURI; some young men dance in realistic imitation of monkeys (DOK), or hornbills, or other animals, singly or in couples. Others mimic the peculiarities of their acquaintances. The women also dance together in a long line, each resting her hands on the shoulders of the one going before her, and all keeping time to the music of the KELURIES as they dance up and down the long gallery. All this is kept up with good humour the whole day long. In the evening more BURAK is drunk and songs are sung, the women mingling with the men, instead of remaining in their rooms as on other festive occasions. Before midnight a good many of the men are more or less intoxicated, some deeply so; but most are able to find their way to bed about midnight, and few or none become offensive or quarrelsome, even though the men indulge in wrestling and rough horseplay with one another. After an exceptionally good harvest the boisterous merry-making is renewed on a second or even a third day.

The harvest festival is the time at which dancing is most practised. The dances fall into two chief classes, namely, solo dances and those in which many persons take part. Most of the solo dances take the form of comic imitations of the movements of animals, especially the big macaque monkey (DOK), the hornbill, and big fish. These dances seem to have no connection with magic or religion, but to be purely aesthetic entertainments. The animals that are regarded with most awe are never mimicked in this way. There are at least four distinct group dances popular among the Kayans. Both men and women take part, the women often dressing themselves as men for the occasion (Pl. 61). The movements and evolutions are very simple. The LUPA resembles the dance on return from war described in Chap. X. In the KAYO, a similar dance, the dancers are led by a woman holding one of the dried heads which is taken down for the purpose; the women, dressed in war-coats, pretending to take the head from an enemy. The LAKEKUT is a musical drill in which the dancers stamp on the planks of the floor in time to the music. The LUPAK is a kind of slow polka. In none of these do the dancers fall into couples. A fifth dance, the dance of the departure of the spirit, is a dramatic representation by three persons of the death of one of them, and of his restoration to life by means of the water of life (this is supposed to be brought from the country which is traversed on the journey to the land of shades). This dance is sometimes given with so much dramatic effect as to move the onlookers to tears.

## CHAPTER 7. The Daily Life of a Kayan Long House

A little before dawn the cocks roosting beneath the house awaken the household by their crowing and the flapping of their wings. The pigs begin to grunt and squeal, and the dogs begin to trot to and fro in the gallery. Before the first streaks of daylight appear, the women light the fires in the private rooms or blow up the smouldering embers; then most of them descend from the house, each carrying in a basket slung on her back several bamboo water-vessels to be filled from the river. Many of them bathe at this time in the shallow water beside the bank, while the toilet of others consists in dashing water over their faces, washing their mouths with water, and rubbing their teeth with the forefinger. Returning to the house with their loads of water (Pl. 63), they boil rice for the household breakfasts and for the dinner of those who are to spend the day in the PADI field or the jungle. The boiled rice intended for the latter use is made up in packets wrapped in green leaves, each containing sufficient for a meal for one person. About half-past six, when the daylight is fully come, the pigs expectant of their meal are clamouring loudly for it. The women descend to them by ladders leading from the private rooms, and each gives to the pigs of her household the leavings of the meals of the previous day. About the same time the men begin to bestir themselves sluggishly; some descend to bathe, while others smoke the fag ends of the cigarettes that were unfinished when they fell asleep. Then the men breakfast in their rooms, and not until they are satisfied do the women and children sit down to their meal. During all this time the chronically hungry dogs, attracted by the odours of food, make persistent efforts to get into their owner's rooms. Success in this manoeuvre is almost always followed by their sudden and noisy reappearance in the gallery, caused by a smart blow with a stick. In the busy farming season parties of men, women, and children will set off in boats for the PADI fields taking their breakfasts with them.

After breakfast the men disperse to their various tasks. During some three or four months of the year all able-bodied persons repair daily to the PADI fields, but during the rest of the year their employments are more varied. The old women and invalids remain all day long in the rooms; the old men lounge all day in the gallery, smoking many home-made cigarettes, and perhaps doing a bit of carving or other light work and keeping an eye on the children. The young children play in and out and about the house, chasing the animals, and dabbling among the boats moored at the bank.

A few of the able-bodied men employ themselves in or about the house, making boats, forging swords, spear-heads, iron hoes, and axes, repairing weapons or implements. Others go in small parties to the jungle to hunt deer and pig, or to gather jungle produce — fruits, rubber, rattans, or bamboos — or spend the day in fishing in the river. During the months of December and January the jungle fruits — the durian, rambutan, mangosteen, lansat, mango, and numerous small sour fruits (Pl. 65) — are much more abundant than at other times; and during these months all other work is neglected, while the people devote themselves to gathering the fruit which forms for a time almost their only food.

Except during the busy PADI season the work of the women is wholly within the house. The heaviest part of their household labour is the preparation of the rice. After breakfast they proceed to spread out PADI on mats on the open platforms adjoining the gallery. While the PADI is being dried by the exposure to sun and wind on these platforms, it must be protected from the domestic fowls by a guardian who, sitting in the gallery, drives them away by means of a long bamboo slung by a cord above the platform. Others fill the time between breakfast and the noonday dinner by bathing themselves and the children in the river, making and repairing clothing, mats, and baskets, fetching more water, cleaning the rooms and preparing dinner. This meal consists of boiled rice with perhaps a piece of fish, pork, or fowl, and, like breakfast and supper, is eaten in the private rooms.

As soon as dinner is over the pounding of the PADI begins (Frontispiece, Vol. II.). Each mortar usually consists of a massive log of timber roughly shaped, and having sunk in its upper surface, which is a little hollowed, a pit about five inches in diameter and nine inches in depth. Into this pit about a quarter of a bushel of PADI is put. Two women stand on the mortar facing one another on either side of the pit, each holding by the middle a large wooden pestle. This is a solid bar of hardwood about seven feet long, about two inches in diameter

in the middle third, and some three or four inches in diameter in the rest of its length. The two ends are rounded and polished by use. Each woman raises her pestle to the full height of her reach, and brings it smartly down upon the grain in the pit, the two women striking alternately with a regular rhythm. As each one lifts her pestle, she deftly sweeps back into the pit with her foot the grain scattered by her stroke.

After pounding the PADI for some minutes without interruption, one woman takes a winnowing pan, a mat made in the shape of an English housemaid's dustpan, but rather larger than this article, and receives in it the pounded grain which the other throws out of the pit with her foot.

Both women then kneel upon a large mat laid beside the mortar; the one holding the winnowing pan keeps throwing the grain into the air with a movement which causes the heavier grain to fall to the back of the pan, while the chaff and dust is thrown forward on to the mat. Her companion separates the rice dust from the chaff by sifting it through a sieve. A considerable quantity of the dust or finely broken rice is formed by the pounding in the mortar, and this is the principal food given to the pigs. The winnowed grain is usually returned to the mortar to be put through the whole process a second time. The clean rice thus prepared is ready for the cooking-pot.

The winnowing and sifting is often done by old women, while the younger women continue the severer task of plying the pestle. In the Kayan houses the mortars are in many cases double, that is to say, there are two pits in the one block of timber, and two pairs of women work simultaneously. In the middle of the afternoon the whole house resounds with the vigorous blows of the pestles, for throughout the length of the gallery two or more women are at work beside each room, husking the day's supply of rice for each family.

For the women of all the peoples, except the Punans, the husking of the PADI is a principal feature of the day's work, and is performed in much the same fashion by all. The Kenyahs alone do their work out of doors beside the PADI barns, sometimes under rude lean-to shelters.

When this task is completed the women are covered with dust; they descend again to the river, and bathe themselves and the children once more. They may gather some of the scanty vegetables grown in small enclosures near most of the houses, and then proceed to prepare supper with their rice and whatever food the men may have brought home from the jungle. For now, about an hour before sundown, the men return from expeditions in the jungle, often bringing a wild pig, a monkey, a porcupine, or some jungle fruit, or young shoots of bamboo, as their contribution to the supper table; others return from fishing or from the PADI fields, and during the sunset hour at a large village a constant stream of boats arrives at the landing-place before the house. Most of the home-comers bathe in the river before ascending to the house. This evening bath is taken in more leisurely fashion than the morning dip. A man will strip off his waist-cloth and rush into the water, falling flat on his chest with a great splash. Then standing with the water up to his waist he will souse his head and face, then perhaps swim a few double overhand strokes, his head going under at each stroke. After rubbing himself down with a smooth pebble, he returns to the bank, and having resumed his waist-cloth, he squeezes the water from his hair, picks up his paddle, spear, hat, and other belongings, and ascends to the gallery. There he hangs up his spear by jabbing its point into a roof-beam beside the door of his chamber, and sits down to smoke a cigarette and to relate the events of his day while supper is preparing. As darkness falls, he goes to his room to sup. By the time the women also have supped, the tropical night has fallen, and the house is lit by the fires and by resin torches, and nowadays by a few kerosene lamps. The men gather round the fireplaces in the gallery and discuss politics, the events of the day, the state of the crops and weather, the news obtained by meetings with the people of neighbouring houses, and relate myths and legends, folk-tales and animal stories. The women, having put the children to bed, visit one another's rooms for friendly gossip; and young men drop in to join their parties, accept the proffered cigarette, and discourse the sweet music of the KELURI,[49] the noseflute, and the Jew's harp (Figs. 17, 18, 19). Or Romeo first strikes up his plaintive tune outside the room in which Juliet sits with the women folk. Juliet may respond with a few notes of her guitar[50] (Fig. 20), thus encouraging Romeo to enter and to take his place in the group beside her, where he joins in the conversation or renews his musical efforts. About nine o'clock all retire to bed, save a few old men who sit smoking over the fires far into the night. The dogs, after some final skirmishes and yelpings, subside among the warm ashes of the fireplaces; the pigs emit a final squeal and grunt; and within the house quietness reigns. Now the rushing of the river makes itself heard in the house, mingled with the chirping of innumerable insects and the croaking of a myriad frogs borne in from the surrounding forest. The villagers sleep soundly till cock-crow; but the European guest, lying in the place of honour almost beneath the row of human heads which adorns the gallery, is, if unused to sleeping in a Bornean long house, apt to be

wakened from time to time throughout the night by an outburst of dreadful yelpings from the dogs squabbling for the best places among the ashes, by the prolonged fit of coughing of an old man, by an old crone making up the fire, by the goats squealing and scampering over the boats beneath the house, or by some weird cry from the depths of the jungle.

In the old days the peace of the night was occasionally broken an hour before the dawn by the yells of an attacking force, and by the flames roaring up from bundles of shavings thrown beneath the house. But happily attacks of this kind are no longer made, save in some few remoter parts of the interior where the European governments have not yet fully established their authority.

The even tenor of the life of a village is interrupted from time to time by certain festivals or other incidents — the harvest festival; the marriage or the naming of a chief's son or daughter; the arrival of important guests (one or more chiefs with bands of followers coming to make peace, or nowadays the resident magistrate of the district); the funeral of a chief; the preparations for war or for a long journey to the distant bazaar of Chinese traders in the lower part of the river; the necessity of removing to a new site; an epidemic of disease; the rites of formally consulting the omens, or otherwise communicating with and propitiating the gods; the operations of the soul-catcher. The more important of these incidents will be described in later chapters. Here we need only give a brief account of the way in which some of them affect the daily round of life in the long house.

A visiting chief will remain seated in his boat, while a follower announces his arrival and ascertains that there is no MALAN (TABU) upon the house which would make the presence of visitors unwelcome. Such MALAN affecting the whole house or village obtains during the storing of the PADI for ten consecutive days, during epidemics of sickness in neighbouring villages, and at the time when the preparation of the farm land begins. If a favourable answer is returned, the visitor remains seated in his boat some few minutes longer, and then makes his way into the gallery, followed by most of his men, who leave their spears and shields in the boats. If the visitor is an intimate friend, the chief of the house will send a son or brother to welcome him, or will even go himself. Arrived in the gallery, the visitor advances to the central platform where the chief of the house awaits him, unstrings his sword from his waist, hangs it upon any convenient hook, and sits down beside his host; while his men, following his example, seat themselves with the men of the house in a semicircle facing the two chiefs. The followers may greet, and even embrace, or grasp by the forearm, their personal friends; but the demeanour of the chief's is more formal. Neither one utters a word or glances at the other for some few minutes; the host remains seated, fidgeting with a cigarette and gazing upon the floor; the visitor sitting beside him looks stolidly over the heads of his followers, and perhaps clears his throat or coughs. Presently a woman thrusts into the semicircle a tray of freshly made cigarettes. One of the men of the house pushes it forward towards the principal visitor, who makes a sign of acceptance by lightly touching the tray; the other, crouching on his heels, lights a cigarette with an ember from the fire, blowing it into a glow as he waddles up to present it to the visiting chief. The latter takes it, but usually allows it to go out. By this time the chief of the house is ready to open the conversation, and, after clearing his throat, suddenly throws out a question, usually, "Where did you start from to-day?" The embarrassing silence thus broken, question and answer are freely exchanged, the cigarette of the visitor is again lighted at the fire by a member of the household, and conversation becomes general. Not infrequently the host, becoming more and more friendly, throws an arm across his guest's shoulders or strokes him endearingly with the palm of his hand.

In the meantime the women are busy preparing a meal, a pig having been killed and hastily cut up. When it is ready, the visitors, if old friends, are invited to partake of it in the chief's room. But if they are not familiar acquaintances, the meal is spread for them in the gallery on platters placed in a long row, one for each guest; each platter containing many cubes of hot boiled pork and two packets of hot boiled rice wrapped in leaves. The space is surrounded with a slight bamboo fence to keep away the dogs. In either case the visitors eat alone, their hosts retiring until the meal is finished. As the chief's wife retires, she says, "Eat slowly, my children, our food is poor stuff. There is no pork, no fish, nothing that is good." Before withdrawing, one of the people of the house pours a little water from a bamboo vessel on the right hand of the visiting chief, who then passes on the vessel to his followers. With the hand thus cleansed each guest conveys the food to his mouth, dipping his pieces of pork in coarse salt placed in a leaf beside his platter; and when he has finished eating, he drinks water from a bamboo vessel. The chief, and perhaps also one or more of his upper-class companions, leaves a little of the pork and a little rice on the platter to show that he is not greedy or ravenous; and his good breeding prompts him to prove his



satisfaction with the meal by belching up a quantity of wind with a loud and prolonged noise, which is echoed by his followers to the best of their ability. After thus publicly expressing his appreciation of his host's hospitality, he rinses out his mouth, squirting out the water towards the nearest gap between the floor boards, rubs his teeth with his forefinger, again rinses his mouth, and washes his hand. Then relighting his cigarette, which he has kept behind his ear or thrust through the hole in its shell, he rejoins his host, who awaits him on the dais.

On such an occasion, and in fact on any other occasion suggestive of festivity, the evening is enlivened with oratory, song, and drink. After supper the men gather together about the chiefs, sitting in close-set ranks on and before the dais. At a hint from the chief a jar of BURAK (rice-spirit) is brought into the circle. This may be the property of the chief or of any one of the principal men, who, by voluntarily contributing in this way towards the entertainment of the guests, maintains the honour of the house and of its chief. A little is poured into a cup and handed to the house-chief, who first makes a libation to the omen-birds and to all the other friendly spiritual powers, by pouring a little on to the ground through some crevice of the floor, or by throwing a few drops out under the eaves, saying, as he does so, "Ho, all you friendly spirits." Then he drinks a little and hands back the cup to the young man who has taken charge of the jar of spirit. The latter, remaining crouched upon his heels, ladles out another cupful of spirit and offers it in both hands to the principal guest, who drinks it off, and expresses by a grunt and a smack of the lips, and perhaps a shiver, his appreciation of its quality. The cup is handed in similar formal fashion to each of the principal guests in turn; and then more cups are brought into use, and the circulation of the drink becomes more rapid and informal. As soon as each man has had a drink, the house-chief rises to his feet and, addressing himself to his guest, expatiates upon his admirable qualities, and expresses eloquently the pleasure felt by himself and his people at this visit. Then speaking in parables and in indirect fashion, claiming perhaps indulgence on the ground that he is merely talking in his sleep, he touches upon local politics at first delicately; then warming up he speaks more directly and plainly. He may become much excited and gesticulate freely, even leaping into the air and twirling round on one foot with outstretched right arm in a fashion that directs his remarks to each and all of the listening circle; but, even though he may find occasion to admonish or reproach, or even hint at a threat, his speech never transgresses the strictest bounds of courtesy. Having thus unburdened himself of whatever thoughts and emotions are evoked by the occasion, he takes from the attendant Ganymede a bumper cup of spirit and breaks into song. Standing before his guest and swinging the cup repeatedly almost to his (the guest's) lips, he exhorts him in complimentary and rhyming phrases to accept his remarks in a friendly spirit, and reminds him of the age and strength of their family and tribal relations, referring to their ancestral glories and the proud position in the world of their common race. At the end of each sentence all the men of both parties break out into a loud chorus, repeating the last word or two in deep long-drawn-out musical cadence. Then, with the last words of his extemporised song, the chief yields up the cup to the expectant guest, who, having sat rigidly and with fixed gaze throughout the address, takes it in one long draught, while the chorus swells to a deep, musical roar. At this moment the circle of auditors, if much excited, will spring to their feet and swell the noise by stamping and jumping on the resounding planks. The house-chief smilingly strokes his guest from the shoulder downwards and resumes his seat. The chorus and commotion die away, and are followed by a moment of silence, during which the guest prepares to make his reply in similar fashion. He rises and begins by naming and lightly touching or pointing to his host and other of the principal men present. Then he makes acknowledgment of the kind and flattering reception accorded him, and his pleasure at finding this opportunity of improving the understanding between himself and his hosts. "The views so eloquently expressed by my friend (naming him and using some complimentary title, E.G. brother or father) are no doubt correct. Indeed, how could it be otherwise? But I have been told so and so, and perhaps it may be, ..." and so he goes on to state his own views, taking care to shift the responsibility for any remaining dissension on to the shoulders of some distant third party. He congratulates all parties on this free discussion of matters of common interest, and with free gesticulation exhorts them to turn a deaf ear to vague rumours and to maintain friendly relations. Then, dropping down beside his host, he says "Take no notice of what I have said, I am drunk." Ganymede again approaches him with a bumper cup, and then rising to his feet and calling on his men, he addresses his host in complimentary song and chorus, using the gestures and expressions peculiar to his own people. The song culminates as before in a general chorus, long drawn out, while the house-chief drains the cup.

The cups then circulate freely, and the smoking of cigarettes is general; other shorter speeches may be made, perhaps by the sons or brothers of the chiefs. As the evening wears away, both guests and hosts become

increasingly boisterous and affectionate; but few or none on an occasion of this sort become intoxicated or quarrelsome. If a man becomes a little too boisterous, he is led away to one of the sleeping platforms in the gallery, and kept there until he falls asleep.

During an evening of this sort the women congregate in the adjacent rooms, where they can overhear the proceedings; and if they find these exceptionally interesting, they will congregate about the doors, but will strictly abstain from interfering with, them in any way. The flow of speech and song and conversation goes on uninterruptedly, except when the occasional intrusion into the circle of some irrepressible dog necessitates its violent expulsion; until, as midnight approaches, the men drop away from the circle by twos and threes, the circle being finally broken up when the visiting chief expresses a desire to sleep. Each guest spreads his own mat on the platform assigned to the party, and the men of the house retire to their rooms.

We will not conclude this chapter without stating that among the Kayans, Kenyahs, and most of the Klemantans, alcoholic intoxication is by no means common. At great feasts, such as are made at the close of the harvest or on the return of a successful war-party, much BORAK is drunk, the women joining in, and a few of the men will usually become quite drunk; but most of them will hardly go further than a state of boisterous jollity.

Although in a year of good PADI harvest each family constantly renews its supply of BORAK, yet the spirit is never drunk in private, but only on festive occasions of the kind described above, or when a man entertains a small party of friends in his own chamber.

The account given above of the reception and entertainment of guests would apply with but little modification to the houses of the Kenyahs and Klemantans. In the Sea Dayak house the reception and entertainment of guests is less ceremonious, and is carried out by the unorganised efforts of individuals, rather than by the household as a whole with the chief at its head. On the arrival of a party of visitors, the people of each room clamorously invite the guests to sit down before their chamber. The guests thus become scattered through the house. First they are offered betel nut and sirih leaf smeared with lime to chew, for among the Sea Dayaks this chewing takes the place of the smoking of cigarettes which is common to all the others; and they are then fed and entertained individually, or by twos and threes, in various rooms. No pig is killed or rice-spirit offered, though possibly a toasted bat or bit of salted wild pig will be served as a relish.

At great feasts the Sea Dayaks drink more freely than the other peoples, except the Muruts. Men and women alike drink deeply, and many become intoxicated. The men take pride in drinking the largest possible quantity; and when the stomach is filled, will vomit up large quantities, and then at once drink more, the women pressing it upon them. The Dayaks and Muruts alone thus sink in the matter of drink to the level of those highly cultured Europeans among whom a similar habit obtains: while among all the other tribes strong drink is seldom or never abused, but rather is put only to its proper use, the promotion of good fellowship and social gaiety.

## CHAPTER 8. Life on the Rivers

With the exception of the Punans and some of the Muruts who inhabit the few regions devoid of navigable streams, all the peoples of Borneo make great use of the rivers. The main rivers and their principal branches are their great highways, and even the smallest tributary streams are used for gaining access to their PADI fields. It is only when hunting or gathering jungle produce that they leave the rivers. Occasionally PADI is cultivated at a distance of a mile or more from the nearest navigable stream, and a rough pathway is then made between the field and the nearest point of the river. Here and there also jungle paths are made connecting points where neighbouring rivers or their navigable tributaries approach closely to one another. In the flat country near the coast, where waterways are less abundant than in the interior, jungle tracks are more used for communication between villages. Where a route crosses a jungle swamp, large trees are felled in such a way that their stems lie as nearly as possible end to end. Their ends are connected if necessary by laying smaller logs from one to the other. In this way is formed a rude slippery viaduct on which it is possible for an agile and bare-footed man to walk in safety across swamps many miles in extent.

But the jungle paths are only used when it is impossible to reach the desired point by boat, or if the waterway is very circuitous. On the lower and deeper reaches of the rivers the paddle is the universal instrument of propulsion. It is used without any kind of rowlock — the one hand, grasping the handle a little above the blade, draws the blade backwards through the water; the other hand, grasping the T-shaped upper end, thrusts it forward. The lower hand thus serves as a fulcrum for the other.

A small boat may be propelled by a single rower, who, sitting at the stern, uses the paddle on one side only, and keeps the boat straight by turning the paddle as he finishes his stroke. In a boat of medium size one man seated at the stern devotes himself to steering with his paddle, although here and there among the coast-people a fixed rudder is used. In a war boat of the largest size, the two men occupying the bow-bench and the four men on the two stern-most benches are responsible for the steering; the former pull the bow over, or lever it in the opposite direction.

During a day's journey the crew of a boat will from time-to-time lighten their labour with song, one man singing, the others joining in the chorus; and if several boats are travelling in company the crews will from time to time spurt and strive to pass one another in good-humoured rivalry. At such times each crew may break out into a deep-pitched and musical roar, the triumphal chorus of a victorious war party.

In the upper reaches of the rivers there are numerous rapids, and here and there actual falls. The boat is usually propelled up a rapid by poling. Each member of the crew has beside him a stout pole some eight or nine feet long; and when the boat approaches a rapid, the crew at a shout from the captain, usually the steersman, spring to their feet, dropping their paddles and seizing their poles. Thrusting these against the stony bottom in perfect unison, the crew swings the boat up through the rushing water with a very pleasant motion. If the current proves too strong and the boat makes no progress, or if the water is too shallow, three or four men, or, if necessary, the whole crew, spring into the water and, seizing the boat by the gunwale, drag it upstream till quieter water is reached. It is necessary for a man or boy to bale out the water that constantly enters over the gunwale while the boat makes the passage of a rapid. All through these exciting operations the captain directs and admonishes his men unremittingly, hurling at them expressions of a strength that would astonish a crew on the waters of the Cam or Isis: "Matei tadjin selin" (may you die the most awful death) is one of the favourite phrases. These provoke no resentment, but merely stimulate the crew to greater exertions.

Sometimes, when much water is coming down after heavy rains, the current is so swift in deep places that neither paddling, poling, nor wading is possible. Then three or four men are landed on the bank, or on the boughs of the trees, and haul on the boat with long rattans, scrambling over rocks and through the jungle as best they can.

The passage down stream in the upper reaches of a river is even more exciting and pleasurable. The crew paddles sufficiently to keep good steerage way on the boat, as it glides swiftly between the rocks and shallows; as it shoots over the rapids, the steersman stands up to choose his path, the water splashes and gurgles and leaps over

the gunwale, and the men break out into song. The smaller waterfalls do not check its onward rush; as the boat approaches a fall, several men near the bow stand up to see if there is sufficient water; then, as they resume their seats, all paddle with might and main until the boat takes the leap. Occasionally a boat is upset during such an attempt, and rarely one or two of the crew are lost through being hurled against rocks and drowned while stunned.

In making a long journey the nights are passed if possible in friendly villages. When no such village can be reached, the night is passed either in the boats moored to the bank or on the river-bank. In the former case the leaf mats, of which each man carries at least one in his basket, are used to roof the boat; in the latter case a rude hut is quickly built, a framework of saplings lashed together, roofed with the mats, and floored at a level of some feet above the ground with bamboos or slender saplings. On camping in the evening and before starting in the morning, rice is cooked and eaten; and about mid-day the journey is interrupted for about an hour while the party lands on the bank, or, if possible, on a bed of pebbles, to rest and to cook and eat the midday meal.

#### Fishing

Fish are caught in the rivers in several ways, and form an important part of the diet of most of the peoples. Perhaps the cast net is most commonly used. This is a net which, when fully extended in the water, covers a circular patch about six yards in diameter, while its central part rises in a steep cone, to the peak of which a strong cord is tied. The main strands run radially from this central point, increasing in number towards the periphery. They are crossed by concentric strands. The periphery is weighted with bits of metal or stone. This net is used both in deep and in shallow water. In the former case one man steers and paddles a boat, while the other stands at the prow with the cord of the net wound about the right hand. The bulk of the net is gathered up on his right arm, the free end is held in the left hand. Choosing a still pool some two fathoms in depth, he throws a stone into the water a little ahead of the boat, in the expectation that the fish will congregate about the spot as they do when fruit falls from the trees on the banks. Then, as the boat approaches the spot he deftly flings the net so that it falls spread out upon the surface; its weighted edge then sinks rapidly to the bottom, enclosing any fish that may be beneath the net. If only small fish are enclosed, the net is twisted as it is drawn up, the fish becoming entangled in its meshes, and in pockets formed about its lower border. If a large fish is enclosed, the steersman will dive overboard and seize the lower part of the net so as to secure the fish.

Or the boat is paddled to the foot of a small rapid; the fisherman springs out and runs to the head of the rapid, and casts his net in the still water immediately above it where fish frequently congregate.

Or a party takes the same net to the mouth of a small tributary, and, while some hold the net so as to block the mouth almost completely, others run through the jungle to a point some hundred yards up the stream, and then drive down the fish by wading down stream splashing and shouting. As soon as a number of fish come down against the net its upper border is thrown down so as to enclose them.

Another net, made quite flat and some fifteen yards long by four feet wide, is suspended by wooden floats across a small river so that the fish may become entangled in its meshes.

Another net is used only by the women. In shape it is like a deep basin; its wide mouth is attached to a stout circle of rattan, and a wooden bar is tied across the mouth to serve as handle. With this the women catch the sucker fish in the shallow rapids, one turning up stones, the other catching in the net the fish that dart from beneath them.

Yet another mode of netting fish is to suspend a square of net attached by its corners to the ends of two crossed and downward bending sticks. The net is suspended by cords from its corners to the end of a long bamboo, which rests upon a post about its middle. The fisherman lowers the net into the water by raising the landward end of the bamboo lever, and when he sees fish swimming above it, attracted by a bait, he suddenly depresses his end of the bamboo, so as to bring the net quickly above the surface. On the coast drag nets are used.

The SELAMBO is used in small streams where fish are abundant. A fence of upright bamboos is built out from either bank, starting at opposite points and converging down stream to two points near the middle of the stream and about seven feet apart; where each terminates a stout pole is driven firmly into the bed of the river. These two poles are connected by a stout cross-piece lashed to them a little above the level of the water. The cross-piece forms a fulcrum for a pair of long poles joined together with cross-pieces, in such a way that their downstream ends almost meet, while up stream they diverge widely. They rest upon the fulcrum at a point about one-third of their length from their downstream ends. Between the widely divergent parts up stream from the fulcrum a net is loosely stretched. The net lies submerged until fish coming down stream are directed on to the net

by the convergent fences. The fisherman stands on a rude platform grasping the handle—end, and, feeling the contacts of the fishes with the net, throws his weight upon the handle, so bringing the net quickly above the surface. Beside him he has a large cage of bamboo standing in the water, into which the fish are allowed to slide from the elevated net.

A rod and line and baited hook are also in common use. The Kayans make a hook of stout brass wire, cutting a single barb. The Kenyahs use a hook made of rattan thorns. A strip is cut from the surface of a rattan bearing two thorns about an inch apart; this is bent at its middle so that the cut surfaces of the two halves are brought into opposition, and the thorns, facing outward opposite one another, form the barbs. The line is tied to the bend, and the bait is placed over the tip projecting beyond the thorns. When the fish takes the hook into his mouth and swallows the bait, the barbs being released spring outward and secure the fish.

A rough kind of spoon bait is also used with rod and line.

Fish are taken also in traps. The most generally used is the BUBU. This varies in length from eighteen inches to eight feet or even more. The body of the trap is a conical cage of bamboo. From the wide mouth of the cone a second smaller flatter cone passes upwards within the outer one; the slender bamboo strips of which it is made come almost together in the centre, their inner ends being free and pliable. This is fixed beside the bank, its mouth turned down stream, and a few stakes are driven into the bed of the river to guide the fish into the mouth; or it may be laid in shallow water, two barriers of stones converging to its mouth. The fish working up stream pass in at the mouth, and, when they have passed the inner lips, cannot easily pass out again.

A still simpler trap consists merely of a long slender cone of bamboo strips. The fish entering the mouth and passing up to the confined space of the other end become wedged fast in it.

A Sea Dayak trap found in the south—west of Borneo is a cylindrical cage of bamboo attached to a pole driven vertically into the bed of the river. (Fig. 21). At one side of the cage is a circular aperture. Into this fits a section of bamboo, the end of which within the cage is cut into longitudinal strips that are made to converge, forming a cone, through the apex of which the fish can push his way into the cage, but which prevents his return. It is an application of the same valve principle as that used in the trap first described above.

A larger trap is the KILONG, which is used in the lower reaches of the rivers and also on the coast. It consists of a fence of stakes running out from the bank or shore into water some two fathoms in depth. The free end of the fence is wound in a spiral of about two turns. One or two gates are made between the outer and the inner chambers of the spiral on the side nearest to the bank or shore, and are left open when the trap is set. The fish, finding themselves confined by the fence, make for deeper water, and, entering the central chamber, do not readily return. The fisherman then closes the gate and takes out the fish with a landing net.

A prawn trap consists of a cylinder of heavy bark. One end is closed with a conical valve of bamboo strips like that of the two traps described above; the other flattened end is hinged to open for the extraction of the catch. The trap is baited with decaying cocoanut and thrown into the river with a long rattan attached to it and tied to a pole; the trap sinks to the bottom and is examined from time to time.

#### Tuba Fishing

Fish are caught on the largest scale by poisoning the water with the juice of the root of the tuba plant. This is usually practised in the smaller rivers at times of slack water, all the people of a village co—operating. The TUBA plant is cultivated in patches on the PADI fields. Pieces of the roots are cut off without destroying the plants. When a large quantity has been gathered, a fence is built across the river at the spot chosen, and big BUBU traps are let into it facing up stream. Then all the available small boats are manned and brought into the reaches of the river extending about a mile above the fence. Each boat carries a supply of tuba root, which the people bruise by pounding it with wooden clubs against stumps and rocks on the bank or against the side of the boat. Water is thrown into the bottom of the boat and the pounded root is rinsed in the water, pounded again, and again rinsed, until all its poisonous juice is extracted. The water in all the boats, become milky with the juice, is poured at a given signal into the river, either by baling or by overturning the boats. After some twenty minutes the fish begin to rise to the surface and rush wildly to and fro. In the meantime the boats have been put to rights, and now begin to pursue the fish, the men armed with fish—spears, the women with landing—nets. The sport goes on for several hours. Some men armed with clubs stand upon a platform which slopes up at a low angle out of the water and rests upon the fence. Big fish come leaping upon this platform and are clubbed by the men, who have to exert their agility to avoid the spikes with which some of the fish are armed. Large quantities of fish are sometimes

taken in this way; what cannot be eaten fresh are dried and smoked over the fires in the house.

While the TUBA fishing is being arranged and the preparations are going forward, great care is taken to avoid mentioning the word TUBA, and all references to the fish are made in oblique phrases, such as "The leaves (I.E. the fishes) can't float over this fence." This precaution is observed because it is believed that the birds and the bats can understand human speech, and may, if they overhear remarks about the preparations, give warning to their friends the fish, whose magician<sup>[51]</sup> (a bony fish called BELIRA), will then make rain, and, by thus swelling the river, prevent the successful poisoning of the water.

Tickling is also practised with success, the men standing in the edge of a lake among the grass and sedges, where the fish seek cooler water in the heat of the day.

All the methods of taking fish described above are practised by most of the peoples, except of course the use of the drag-net in the sea.

The crocodiles, which are numerous in the lower reaches of the rivers, are not hunted or attacked, save on provocation, by any of the peoples of Borneo except the Malays.<sup>[52]</sup> Occasionally a bather is seized by one of them while in the water or standing on a log floating in deep water; and more rarely a person is dragged out of a small boat, while drifting quietly on deep water at evening. If men and boats are at hand they turn out promptly to attack the crocodile, if it rises to the surface; but there is small chance of rescue. If the victim has sufficient presence of mind and strength to thrust his thumbs against the eyes of the reptile it may release him, escape in this way is not unknown. In the case of a fatal issue, the men of the village turn out to avenge the outrage, and, in the case of the seizure of an important person, those of neighbouring villages will join them. All available boats are manned by men armed with spears, some of which are lashed to the ends of long poles. Congregating in their boats near the scene of the disaster, the men prod the bed of the river with their spears, working systematically up and down river and up the small side streams. In this way they succeed in stabbing some of the reptiles; and in this case, though they usually do not rise to the surface, their bodies are found after some days in the creeks, death having ensued from the inflammation set up in the wounds. The wound caused by a spear-thrust would seldom be fatal to the crocodile, but that the wound is liable to the perpetual assaults of smaller creatures — fish while he is in the water, flies when he lies on the bank. These irritate and extend the wound. The stomachs of those crocodiles that are captured are opened in search of traces of the person taken, traces which usually remain there for some time in the shape of hair or ornaments. If no trace is found the people's vengeance is not satisfied, and they set baited hooks, or pay Malays to do so, partly because the Malays are experts and claim to have potent charms to bring the offender to the hook, partly because a Kayan does not care to take upon himself the individual responsibility of catching a crocodile, though he does not shrink from the collective pursuit. The decaying body of a fowl, monkey, or other animal (Malays sometimes use a living dog) is bound to a strong bar of hard-wood, sharpened at both ends and some fifteen inches in length. A number of small rattans are tied to the bar about its middle, their other ends being made fast to a log. This arrangement is allowed to float down river; if it does not float freely, the crocodile will not take the bait. When a crocodile rises to the bait and swallows it, the bar gets fixed cross-wise in his gullet as he pulls on the rattans. The hunters, having kept the log in sight, then attach the ends of the rattans to the boat, tow the reptile to the bank, and haul him up on dry land. They secure his tail and feet with nooses, which they lash to a pole laid along his back, and lash his jaws together. Throughout these operations the crocodile is addressed deferentially as LAKI (grandfather). He is then left exposed to the sun, when he soon dies; in this way the people avoid the risks attaching to slaying the crocodile with their own hands.

## CHAPTER 9. Life in the Jungle

All the peoples of Borneo support themselves in part by hunting and trapping the wild creatures of the jungle, but for the Punans alone is the chase the principal source of food-supply; the various natural products of the jungle are, with the exception of cultivated sago in some few regions, their only marketable commodities.

### Hunting

The wild pig (*SUS BARBATUS*[53]) is the principal object of the chase, but deer of several species are also hunted and trapped. The largest of these (*CERVUS EQUINUS*) is rather bigger than the English fallow deer; the smallest is plandok, or mouse deer (*TRAGULUS NAPU* and *T. JAVANICUS*), standing only about eight inches at the shoulder; intermediate in size is the muntjac (*CERVULUS MUNTJAC*). There are also small herds of wild cattle (*BOS SONDAICUS*), a small rhinoceros (*R. SUMATRANUS*), large lizards (*VARANUS*), various apes and monkeys, and a large porcupine (*HESTRIX CRASSISPINUS*), and several small mammals, such as otters (*LUTRA*), bear-cats (*ARCTICTIS*), and civet cats (*PARADOAURUS*) of various species, all of which are hunted for their flesh, as well as several birds. The tiger-cat (*FELIS NEBULOSA*) and the bear (*URSUS MALAYANUS*) are hunted for their skins and teeth, and the dried gall-bladder of the bear is sold for medicine.

The pig and deer are most commonly hunted on foot by a party of several men with a pack of four or five dogs. The dogs, having found the trail, chase the pig until he turns on them. The dogs then surround the pig, barking and yelping, and keep it at bay till the men run up and despatch it with their spears. Both men and dogs sometimes get severely bitten and torn by the tusks. During the fruit season the pigs migrate in large herds and cross the rivers at certain places well known to the hunters. The people lie in wait for them in little huts built on the banks, and kill them from their boats as they swim across.

Kenyahs and Klemantans sometimes catch deer by driving them into a *JARING*. This consists of a strong rope of plaited rattans stretched in a straight line across the jungle, from tree to tree, some five feet above the ground. It is generally laid so as to complete the enclosure of an area that is almost surrounded by the river. Dependent from the whole length of the rattan rope is a series of running nooses also of rattan, each of which, overlapping its neighbours on both sides, forms a loop about two feet in diameter. Men armed with spears are stationed along the *JARING*, at short intervals, and the rest of the party with the dogs beat the jungle driving any deer in the enclosed space headlong towards the *JARING*. Some of the deer may escape, but some will usually run their heads into the nooses and fall victims to the spears of the watchers. Both pig and deer are sometimes brought down with the blow-pipe, especially by the Punans, whose favourite weapon it is.

The wild cattle are very wary and dangerous to attack. They sometimes take to the water and are then easily secured. Punans, who hunt without dogs (which in fact they do not possess) will lie in wait for the rhinoceros beside the track by which he comes to his daily mud-bath, and drive a spear into his flank or shoulder; then, after hastily retiring, they track him through the jungle, until they come upon him again, and find an opportunity of driving in another spear or a poisoned dart through some weak spot of his armour.

Birds and monkeys are chiefly killed with the blow-pipe.

### Traps

Traps of many varieties are made. For pig and deer a trap is laid at a gap in the fence about the *PADI* field. It consists of a bamboo spear of which the end is sharpened and hardened in the fire. This is laid horizontally about two feet from the ground, resting on guides. Its butt end is lashed to one end of a springy green pole at right angles to its length; the pole is laid horizontally, one end of it being firmly fixed to a tree, and the other (that carrying the spear) bent forcibly backwards and held back by a loop of rattan. This spring is set by means of an ingenious trigger, in such a way that an animal passing through the gap must push against a string attached to the trigger, and so release the spring, which then drives the bamboo spear across the gap with great force. (The drawing (Fig. 22) Will make clear the nature of the trigger.)

In one variety of this trap the spring is set vertically. The trap is varied in other ways. A curious practice of the Ibans on setting such a trap is to measure the appropriate height of the spear by means of a rod surmounted with a

carving of a human figure (Fig. 23).

Of many ingenious traps for small animals the JERAT is the most widely used (see Fig. 24 and Pl. 85). A rude fence some hundreds of yards, in some cases as much as a mile, in length, is made by filling up with sticks and brushwood the spaces between the trees and undergrowth of the jungle. At intervals of ten or twenty yards narrow gaps are left, and in each of these a JERAT is set to catch the small creatures that, in wandering through the jungle and finding their course obstructed by the fence, seek to pass through the gaps. The gap is floored with a small platform of light sticks, six to eight inches long, laid across it parallel to one another in the line of the fence. The ends of these are supported at one side of the gap, about two inches above the ground, by a cross-stick lying at right angles to them. This stick in turn is supported about one inch above the ground in the following way: the two ends of a green stick are thrust firmly into the ground forming an arch over the end of the platform, and the extremities of the cross-stick are in contact with the pillars of the arch, and kept a little above the ground by being pulled against them by the spring trigger. This consists of a short stick attached by a cord to a strong springy pole thrust vertically into the ground. To set the trigger it is pulled down, bending the pole, and passed under the arch from the platform side outwards; the upper end of the trigger is then kept by the pull of the cord against the curve of the arch, and its lower end is pulled against the middle of the cross-stick. The pressure being maintained by the tension of the cord, this end of the platform is supported by the friction between the trigger and the cross-stick. The cord is prolonged beyond the trigger in a slip noose which lies open on the platform completely across the gap, so that any small animal entering the gap, and stepping upon the platform, necessarily places its feet within the goose. A few leaves are laid on the platform and cord to disguise them. When, then, a pheasant or other creature of appropriate size and weight steps on the platform, its weight causes the cross-stick to slip down from the hold of the trigger, and this, being released, is violently jerked with the noose into the air by the elastic reaction of the bent pole; in a large proportion of cases the noose catches the victim's feet and jerks him into the air, where he dangles by the feet till the arrival of the trapper, who visits his traps twice a day.

Another very curious and strikingly simple plan is employed by the Sea Dayaks for catching the Argus pheasant, whose beautiful wing feathers are highly valued. The cock-birds congregate at certain spots in the jungle, where they display their feathers and fight together. These spots they clear of all obstacles, pulling and pushing away sticks and leaves with their heads and necks, as well as scratching with their feet. The Dayaks, taking advantage of this habit, thrust vertically into the ground slips of bamboo, the edges of which are hardened in the fire and rendered very sharp. In the course of their efforts to remove these obstructions, the birds not infrequently inflict serious wounds about their necks, and weakened by loss of blood, are found by the Dayaks at no great distance from the fighting ground.

Traps of many other kinds are made for animals both large and small, especially by the Sea Dayaks, who use traps more frequently than the other peoples. Our few descriptions will serve to illustrate the ingenuity displayed, the complexity of the mechanical principles involved in some of them, and the extreme simplicity of others. Previous writers have described many of these in detail, and we content ourselves with referring the curious reader to their accounts.[54]

The Klemantans and some of the Kenyahs catch a small ground pigeon (*CHALCOPHAPS INDICA*) in large numbers by the aid of a pipe or whistle, by blowing softly on which the cooing notes of the bird are closely imitated. The instrument consists of a piece of large bamboo closed at one end and having a small hole about its middle (Fig. 25). The hunter, concealed behind a screen of leafy branches, blows across this hole through a long slender tube of bamboo; and when a bird approaches the whistle, he slips over its head a fine noose attached to the end of a light bamboo and, drawing it behind the screen, puts it alive into a cage.

Small parrots are sometimes caught with bird-lime, made with the juice of a rubber-tree.

#### The Gathering of Jungle Produce

The principal natural products gathered by the people in addition to the edible fruits are, gutta-percha, rubber, camphor, various rattans, beeswax and honey, vegetable tallow, wild sago, damar-resin from various trees, and the edible birds' nests.

Small parties of men and boys go out into the jungle in search of these things, sometimes travelling many days up river before striking into the jungle; for it is only in the drier upland forests that such expeditions can be undertaken with advantage. The party may remain several weeks or months from home. They carry with them a supply of rice, salt, and tobacco, cooking-pots and matches, a change of raiment, spears, swords, shields,



blowpipes, and perhaps two or three dogs. On striking into the jungle, they drag their boat on to the bank and leave it hidden in thick undergrowth. While in the jungle they camp in rude shelters roofed with their leaf mats and with palm leaves, moving camp from time to time. They vary their labours and supplement their food—supply by hunting and trapping. Such an expedition is generally regarded as highly enjoyable as well as profitable. As in camping—parties in other parts of the world, the cooking is generally regarded as a nuisance to be shirked if possible. The Sea Dayaks indulge in these expeditions more frequently than others, and such parties of them may often be found at great distances from their homes. In the course of such long excursions they not infrequently penetrate into the regions inhabited by other tribes, and many troubles have had their origin in the truculent behaviour of such parties. Such parties of Sea Dayaks have been known to accept the hospitality of unsuspecting and inoffensive Klemantans, and to outrage every law of decency by taking the heads of old men, women, and children during the absence of their natural defenders.

Valuable varieties of gutta—percha are obtained from trees of more than a score of species. The best is known as Kayan gutta, because it is gathered and sent to the bazaars by the Kayans in a pure form. The trees are felled and the stem and branches are ringed at intervals of about eighteen inches, a narrow strip of bark being removed at each ring. The milky viscid sap drips out into leaf—cups, which are then emptied into a cylindrical vessel of bark. Water is then boiled in a large pan beside the tree, a little common salt is added to the water, and the gutta is poured into the boiling water, when it rapidly congeals. Then, while still in a semiviscid state, it is kneaded with the feet and pressed into a shallow wooden frame, which in turn is compressed between two planks. In this way it is moulded into a slab about one and a half inches thick, about a foot long, and about six inches across at one end, two inches across at the other. While it is still warm a hole is pierced through the narrower end; and the slab is then thrown into cold water, where it sets hard. In this form it reaches the market at Singapore, where it is valued at about five hundred dollars ([pound sterling]50) the hundredweight.

Gutta of an inferior quality is obtained in large quantities by tapping a large tree (JELUTONG) which grows abundantly in the low—lying jungles.

The best rubber, known as PULUT by the Kayans, is obtained by them from a creeper, the stem of which grows to a length of fifty to a hundred feet and a diameter of six inches or more. It bears a brilliant red luscious fruit which is eaten by the people; its seeds being swallowed become distributed in this way. The Punans carefully sow the seed they have swallowed, and transplant the young seedlings to the most suitable positions. The milky juice of the creeper is gathered and treated in much the same way as the gutta. It is rolled up while hot into spherical lumps, each of which is pierced with a hole for convenient transportation.

Camphor is formed in the crevices of the stems of old trees of the species *DRYOBALANOPS AROMATICA*, when the heart is decayed leaving a central hollow. The tree is cut down, the stem split up, and the crystalline scales of pure camphor are shaken out on to mats. It is then made up in little bundles wrapped in palm leaves. The large—flaked camphor fetches as much as [pound sterling]6 a pound in the Chinese bazaar. Special precautions are observed by men in search of camphor. A party of Kayans, setting out to seek camphor, commonly gets the help of Punans, who are acknowledged experts in this business. Omens are taken before setting out, and the party will not start until favourable omens have been observed. The party is LALI from the time of beginning these operations. They will speak to no one outside the party, and will speak no word of Malay to one another; and it is considered that they are more likely to be successful if they confine themselves to the use of a peculiar language which seems to be a conventional perversion of the Punan speech.

On entering a small river the party stretches a rattan across its mouth; and, where they leave the river, they erect on the bank a pole or frayed stick.[55] Other persons seeing such sticks set up will understand and respect the party's desire for privacy. They then march through the jungle to the place where they expect to find a group of camphor trees, marking their path by bending the ends of twigs at certain intervals in the direction in which the party is moving. Having found a likely tree they cut into the stem with a small long—bladed axe, making a deep small hole. An expert, generally a Punan, then smells the hole and gives an opinion as to the chances of finding camphor within it. If he gives a favourable opinion, the tree is cut down and broken in pieces as described above. On cutting down the tree, an oil which smells strongly of camphor sometimes pours out and is collected. The party remains LALI until the collection of the camphor is completed; no stranger may enter their hut or speak with them. The practice of collecting camphor in this way is probably a very ancient one,[56] whereas the collection of gutta and rubber has been undertaken only in recent years in response to the demands of the

European market.

Many varieties of the rattan palm grow luxuriantly in the forests of Borneo, some attaining a length of 150 to 200 feet. It is a creeper which makes its way towards the light, suspending itself to branches and twigs by means of the curved spines which prolong the midribs of the leaves. The cane is collected by cutting through the stem near its root, and hauling on it, several men combining their efforts. The piece cut down is dragged through the jungle to the river-bank. There it is cut into lengths of fifteen feet, I.E. two and a half spans, and dried in the sun. If the sap is thoroughly dried out, the cane assumes a permanent yellow colour; but if any is left, the cane darkens when soaked in water. When a large number of bundles has been collected, they are bound together to form a raft. On this a hut is erected, and two or three men will navigate the raft down river to the Chinese bazaar, which is to be found in the lower part of every large river.

The small yellow fruit of the rattan is gathered in large quantities and subjected to prolonged boiling. The fluid becomes of a bright crimson colour; this, boiled down till it has the consistency of beeswax, is known as dragon's blood, and is used by the people as a colouring matter and also exported for the same purpose.

Honey and beeswax are found in nests which are suspended by the wild bee from high branches of the MINGRIS (COOMPASSIA) and TAPANG (ARBOURIA) trees, sometimes many nests on one tree. To reach the nest the men climb the tree by the aid of a ladder somewhat in the fashion of a steeple-jack. A large number of sharpened pegs of ironwood are driven into the softer outer layers of the stem in a vertical row about two feet apart, and bamboos are lashed in a single vertical row to the pegs and to one another and to the lower branches. The ladder is built up until at some sixty or eighty feet from the ground it reaches a branch bearing a nest. The taking of the nests is usually accomplished after nightfall. A man ascends the ladder carrying in one hand a burning torch of bark, which gives off a pungent smoke, and on his back a large hollow cone of bark. Straddling out along the bough, he hangs his cone of bark beneath the nest, smokes out the bees, and cuts away the nest from the bough with his sword, so that it falls into the cone of bark. Then, choosing a piece of comb containing grubs, he munches it with gusto, describing from his position of advantage to his envious friends the delicious quality of the grubs. After thus gathering two or three nests he lets down the cone with a cord to his eagerly expectant comrades, who then feast upon the remaining grubs and squeeze out the honey into jars. The tree having been cleared of nests in this way, the wax is melted in an iron pot and moulded in balls. The honey is eaten in the houses; the wax is sold to the Chinese traders at about a shilling a pound.

Vegetable tallow is procured from the seeds of the ENKABONG tree (SHOREA). The seeds are crushed and the tallow melted out and gathered in bamboos. It is used as a food, generally smeared on hot rice. It is sometimes a principal feature of the Punan's diet for considerable periods.

Wild sago is abundant and is much used by Punans, and occasionally by most of the other peoples when their supply of PADI is short. The sago tree is cut down and its stem is split into several pieces with wedges. The pith is knocked out with a bamboo mallet. The sago is prepared from the pith by the women, who stamp it on coarse mats, pouring water upon it. The fine grains of sago are carried through on to a trough below. It is then washed and boiled in water, when it forms a viscid mass; this is eaten with a spoon or with a strip of bamboo bent double, the two ends of which are turned round in the sago and withdrawn with a sticky mass adherent; this is plunged in the gravy OF pork and carried to the mouth. It is generally considered a delicacy.

Many varieties of the forest trees exude resins, which are collected and used for torches and for repairing boats, as well as brought to the bazaars, where the best kinds fetch very good prices. Sometimes the resin is found in large masses on the ground where it has dripped from the trees.

A curious and valuable natural product is the bezoar stone. These stones are found in the gall-bladder and intestines of the long-tailed monkey SEMNOPITHECUS (most frequently of S. HOSEI and S. RUBICUNDUS). They are formed of concentric layers of a hard, brittle, olive-green substance, very bitter to the taste. A soft brown variety is found in the porcupine. Both kinds are highly valued by the Chinese as medicine. The monkeys and porcupines are hunted for the sake of these stones. A similar substance, also highly valued as a medicine by the Chinese, is sometimes found as an accretion formed about the end of a dart which has been broken off in the flesh of S. HOSEI and has remained there for some long period.

The most important of the natural products gathered by the people are the edible nests of three species of swift: COLLOCALIA FUCIPHAGA, whose nest is white; C. LOWII, whose nest is blackish; and C. LINCHII, whose nest contains straw and moss as well as gelatine. All three kinds are collected, but those of the first kind are

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much more valuable than the others. The nest, which is shaped like that of our swallow, consists wholly of a tough, gelatinous, translucent substance, which exudes from the bill of the bird as it builds. We do not understand the physiology of this process. The people generally believe that the substance of the nest is dried seafoam which the birds bring from the sea on returning from their annual migration.

The nests are built always on the roofs and walls of large caves: the white nests in low-roofed caves, generally in sandstone rock; the black in the immense lofty caves formed in the limestone rocks. The latter are reached by means of tall scaffoldings of strong poles of bamboo, often more than a hundred feet in height. The nests are swept from the rock with a pole terminating in a small iron spatula, and carrying near the extremity a wax candle; falling to the ground, which is floored with guano several feet thick, they are gathered up in baskets. The white nests are gathered three times in the year at intervals of about a month, the black nests usually only twice; as many as three tons of black nests are sometimes taken from one big cave in the course of the annual gathering. Each cave, or, in the case of large caves, each natural subdivision of it, is claimed as the property of some individual, who holds it during his lifetime and transmits it to his heirs. During the gathering of the nests of a large cave, the people live in roofless huts built inside it. The nests are sold to Chinese traders — the black nests for about a hundred dollars a hundredweight, and the white nests for as much as thirty or forty shillings per pound.

## CHAPTER 10. War

The Kayans are perhaps less aggressive than any other of the interior peoples with the exception of the Punans. Nevertheless prowess in war has made them respected or feared by all the peoples; and during the last century they established themselves in the middle parts of the basins of all the great rivers, driving out many of the Klemantan communities, partly by actual warfare, partly by the equally effective method of appropriating to their own use the tracts of jungle most suitable for the cultivation of PADI.

The fighting quality of the individual Kayan, the loyalty and obedience of each household to its chief, the custom of congregating several long houses to form a populous village upon some spot carefully chosen for its tactical advantages (generally a peninsula formed by a deep bend of the river), and the strong cohesion between the Kayans of different and even widely separated villages, — all these factors combine to render the Kayans comparatively secure and their villages immune from attack. But though a Kayan village is seldom attacked, and though the Kayans do not wantonly engage in bloodshed, yet they will always stoutly assert their rights, and will not allow any injury done to any member of the tribe to go unavenged. The avenging of injuries and the necessity of possessing heads for use in the funeral rites are for them the principal grounds of warfare; and these are generally combined, the avenging of injuries being generally postponed, sometimes for many years, until the need for new heads arises. Though an old dried head will serve all the purposes of the rites performed to terminate a period of mourning, yet it is felt that a fresh head (or heads) is more desirable, especially in the case of mourning for an important chief.

When an old head is used in these rites, it is customary to borrow it from another house or village, and it is brought to the house by a party of warriors in the full panoply of war, who behave both on setting out and returning as though actually on the war-path.

It may be said generally that Kayans seldom or never wage war on Kayans, and seldom attack others merely to secure heads or in sheer vainglory, as the Ibans not infrequently do. Nor do they attack others merely in order to sustain their prestige, as is sometimes done by the Kenyahs, who in this respect carry to an extreme the principle that attack is the most effective mode of defence.

War is generally undertaken by the Kayans very deliberately, after much preparation and in large well-organised parties, ranging in numbers from fifty to a thousand or more warriors, made up in many cases from several neighbouring villages, and under the supreme command of one chief of acknowledged eminence.

The weapons and war-dress are similar among all the peoples. The principal weapon is the sword known as PARANG ILANG, or MALAT, a heavy blade (Pl. 91) of steel mounted in a handle of horn or hardwood. The blade, about twenty-two inches in length, has the cutting edge slightly bowed and the blunt back edge slightly hollowed. The edges diverge slightly from the handle up to a point about five inches from the tip, where the blade attains its maximum width of nearly two inches. At this point the back edge bends sharply forward to meet the cutting edge at the tip. A very peculiar feature of the blade is that it is slightly hollowed on the inner surface (I.E. the thumb side or left side in the case of the PARANG, of a right-handed man, the right side in case of one made for a left-handed man), and is convex in transverse section to a corresponding degree on the other surface. This peculiar shape of the blade is said to render the PARANG, more efficient in sinking into or through either limbs or wood, and is more easily withdrawn after a successful blow. This weapon is carried in a wooden sheath suspended by a plaited waist-strap, and is the constant companion of every man; for it is used not only in warfare, but also for a variety of purposes, such as the hewing down of jungle undergrowth, cutting rattans and bamboos, the rough shaping of wooden implements.

The weapon second in importance is the spear (Pl. 92). It consists of a flat steel blade, about one foot in length, of which the widest part (between one and two inches) is about four inches from the tip. The tip and lateral edges of the blade are sharp, and its haft is lashed with strips of rattan to the end of a wooden shaft. The extremity of the haft is bent outwards from the shaft, to prevent its being dragged off from the latter. The shaft is of tough wood and about seven feet in length; its butt end is usually shod with iron. The spear is used not only for

thrusting, but also as a javelin and as a parrying stick for warding off the spears hurled by the foe. It is always carried in the boat when travelling on the river, or in the hand during excursions in the jungle.

The blow-pipe, which projects a poisoned dart, is used by many of the Kayans in hunting, but is hardly regarded as a weapon for serious use in warfare.

Beside the principal spear, two or three short spears or javelins, sometimes merely pointed bars of hardwood, are usually carried in the left hand when an attack is being made.

Beside the sword and the spears the only weapons commonly used are heavy bars of ironwood, sharpened at both ends and flung so as to twirl rapidly in the air. They are chiefly used in defending houses from attack, a store of them being kept in the house. For the defence of a house against an expected attack, short sharp stakes of split bamboo are thrust slantingly into the ground, so as to present the fire-hardened tip towards the feet of the oncoming foe.

The interior peoples have long possessed a certain number of European-made muskets (mostly flint-locks) and small Bruni-made brass cannon, obtained from the Malay and Chinese traders. The latter were chiefly valued for the defence of the house, but were sometimes mounted in the bows of the war-boats. The difficulty of obtaining supplies of gunpowder has always restricted greatly the use of firearms, and in recent years the European governments have strictly limited the sale of gunpowder and firearms; and even at the present day any war-party commissioned by one of the governments to execute any police measure, such as apprehending, or burning the house of, people who have wantonly killed others, has to rely in the main on its native weapons.

The equipment of the fighting-man consists, in addition to his weapons, of a war-cap and war-coat and shield (Pl. 93 and Fig. 26). The former is a round closely-fitting cap woven of stout rattans split in halves longitudinally. It affords good protection to the skull against the stroke of the sword. It is adorned with two of the long black-and-white barred feathers of the hornbill's tail in the case of, any man who has earned this distinction by taking part in successful expeditions.

The war-coat is made of the skin of the goat, the bear, or (in case of distinguished chiefs) of the tiger-cat. The whole of the skin in one piece is used, except that the skin of the belly and of the lower parts of the forelimbs are cut away. A hole for the warrior's head is made in the mid-dorsal line a little behind the skin of the head, which is flattened out and hangs over the chest, descending to the level of the navel; while the skin of the back, flanks, and hind limbs in one large flap, covers the back and hind parts of the warrior as far as the bend of the knees. A large pearly shell usually adorns the lower end of the anterior flap. The warrior's arms are thus left free, but unprotected. In the finest coats there is a patch of brightly coloured beadwork at the nape of the neck, and the back-flap is adorned with rows of loosely dangling hornbills' feathers; but these again are considered appropriate only to the coats of warriors of proved valour.

The Kayan shield is an oblong plate cut from a single piece of soft wood. Its ends are pointed more or less acutely; the length between the points is about four feet. The inner surface forms a flat hollow; the outer is formed by two flat surfaces meeting in a flat obtuse angle or ridge extending from point to point. The grain of the wood runs longitudinally, and a downward falling PARANG is liable to split the wood and become wedged fast in it. In order to prevent the shield becoming divided in this way, and to hold fast the blade of the sword, it is bound across with several stout strips of rattan which are laced closely to the wood with finer strips. The handle, carved out of the same solid block of wood as the body of the shield, is in the middle of the concave surface; it is a simple vertical bar for the grasp of the left hand. The Kayan shield is commonly stained red with iron oxide, and touched up with black pigment, but not otherwise decorated.

Wooden shields of this kind are used by almost all the tribes, but some of them decorate their shields elaborately. The two surfaces of almost all Kenyah shields (Fig. 27) are covered with elaborate designs picked out in colours, chiefly red and black. The designs are sketched out on the wood with the point of a knife, and the pigment is applied with the finger and a chisel-edged stick. The principal feature of the designs on the outer surface is in all cases a large conventionalised outline of a face with large eyes, indicated by concentric circles in red and black, and a double row of teeth with two pairs of canines projecting like huge tusks. This face seems to be human, for, although in some shields there is nothing to indicate this interpretation, in others the large face surmounts the highly conventionalised outline of a diminutive human body, the limbs of which are distorted and woven into a more or less intricate design. Each extremity of the outer surface is covered by a similarly conventionalised face-pattern on a smaller scale. On the inner side each longitudinal half is covered with an

elaborate scroll-pattern, generally symmetrical in the two halves; the centre of this pattern is generally a human figure more or less easily recognisable; the two halves sometimes bear male and female figures respectively.

The shields most prized by the Kenyahs are further decorated with tufts of human hair taken from the heads of slain enemies. It is put on in many rows which roughly frame the large face with locks three or four inches in length on scalp, cheeks, chin, and upper lip; and the smaller faces at the ends are similarly surrounded with shorter hair. The hair is attached by forcing the ends of the tufts into narrow slits in the soft wood and securing it with fresh resin.

The Klemantan shields are, in the main, variations on the Kenyah patterns. The Murut shields closely resemble those of the Kayans, though the Dusuns, who have the domesticated buffalo, use a shield of buffalo-hide attached to the forearm by a strap — a feature unknown in all the other types, which are borne by the handle only. The Sea Dayaks nowadays make a greater variety of shields, copying those of the other tribes with variations of their own. The shield originally used by them before coming into contact with many other tribes, but now discarded, was made of strips of bamboo plaited together and stiffened with a longitudinal strip of wood (Fig. 28). It was of two shapes, both oblong, one with rounded, the other with pointed ends.

The Land Dayaks still use a shield of tough bark (Fig. 29), and it is not improbable that these were used by other tribes at no distant date.

Every Kayan household possesses, beside the many smaller boats, one or more boats especially designed for use in war. A typical war-boat is about 100 feet in length, from six to seven feet wide in its middle part, and tapers to a width of about three and a half feet at bow and stern. In some cases the length of the war-boat, which is always made from a single log, is as much as 145 feet in length (Pl. 96), but so large a boat is unwieldy in use, and its construction costs an excessive amount of labour. The ordinary war-boat carries from sixty to seventy men seated two abreast on the cross-benches. It is steered by the paddles of the two bow-men and the four next the stern. One of these war-boats, manned by sixty or seventy paddlers, can maintain a pace about equal to that of our University racing eights.[57]

War is only undertaken after formal consultation and many discussions between the chief or chiefs and all the leading men. If the village primarily concerned does not feel itself strong enough to achieve its ends, it will seek the help of some neighbouring village, usually, but not always one of its own tribe. The discussion may be renewed day after day for some little time, before the decision to fight is taken and the time for the expedition is fixed.

The next step is to seek favourable omens, and two men are told off for this work. They repair to some spot in the jungle, or more commonly on the bank of the river, where they build a small hut; they adorn it by fraying the poles of its framework, and so secure themselves against interruptions by passing acquaintances. The sight or sound of certain birds and beasts is favourable, of others unfavourable; but the favourable creatures must be observed in a certain order, if the omens are to be entirely satisfactory. If very bad omens are observed, the men return home to report the fact, and will make another attempt after a few days. If the omens are of mixed character, they will persist for some time, hoping to get a sufficient number of good omens to counteract or nullify the bad. When seeking for their place of observation, their choice is determined by seeing a spider-hunter (ARACHNOTHERA) flying across the river, chirping as it flies. When this is seen they stop the boat, calling out to the bird, "O friend ISIT, protect us and give us success." One of the men lands on the bank, hews out a pole about eight feet long, cuts upon it bunches of shavings without detaching (Pl. 97) them from the pole, and thrusts one end of it into the ground so that it remains sloping towards the abode of the foe. While this is being done on the bank, fire of some sort (if only a cigarette) is lighted in the boat, and the position is explained more fully to the bird, but without any mention of the name of the enemy. The observers then erect a hut near the omen-pole for their shelter, and pass the night there before looking out for the omen-bird next desired. This is the trogan (HARPACTES DUVAUCELII), which has a peculiar soft trilling note and a brilliant red chest. When this bird appears, it is addressed in the same way as the spider-hunter; and this second step of the process is also marked by a feathered stick thrust into the ground before the hut. Then they spend another night in the hut hoping for significant dreams. To dream of abundance of fruit (which symbolises heads) is favourable; any dream of a disagreeable or fearful situation is unfavourable. After a favourable dream comes the most important stage of the business, the observation of the hawks. They look for LAKI NEHO from the door of their hut about nine o'clock in the morning. As soon as a hawk is seen, they light a fire and call on him to go to the left, waving a feathered

stick in that direction, and, shouting at the top of his voice, one of them pours out a torrent of words addressed to the hawk. If he goes out of sight towards the right, they console themselves by remarking that he is one of low degree, and they sit down to wait for another. If two hawks are seen to fight in the air, that foretells much bloodshed. They are not satisfied until they see a hawk sail far away out of sight towards the left. Then a break is made; after which they observe the hawks again, until they see one sail out of sight towards the right. If all this is accomplished without the intervention of unfavourable omens, they return home to report progress; but immediately return to the hut and remain there. Then for one, two, or even three days, all the men of the house stay at home quietly, busying themselves in preparing boats and weapons. The chief, or some deputy, then performs the rites before the altar—post of the war—god that stands before the house in the way described in Chap. XV. The omens given by the hawks on this occasion are guarantees for the safety of the house and those left in it, and against accidents and sickness incidental to the journey; they have no reference to the actual fighting.[58] All the men of the war—party then proceed in their war—boats to the spot where the war—omens have been observed, and camp round about it in roughly built huts. Here they will remain at least two days, establishing their connection with the favourable omen—birds. From this encampment they may not return to the house, and, if they are expecting a party of allies, they may await them here. By this time the war—fever is raging among them, and rumours of the preparations of the enemy are circulating. Spies or scouts may be sent out to seek information about the enemy; but usually such information is sought from the liver of a pig with the customary ceremony. A sharp ridge on the liver dividing their own region from that of the enemy is unfavourable, a low soft ridge is favourable.

From the moment of leaving the village the men of the war—party must observe many tabus until their return home. They may not eat the head of a fish; they must use only their home—made earthen pots; fire must be made only by friction (see Pl. 89); they must not smoke; boys may not lie down, but must sleep sitting. The people who remain at home are not expected to observe these tabus; they may go to the farms, but must keep quiet, and undertake nothing outside the ordinary routine.

If the object of the attack is a village in their own river, the expedition paddles steadily day after day until it reaches the mouth of some small stream at a distance of some miles from the enemy's village. Forcing their boats some two or three miles up this stream they make a camp. Here two solid platforms are built about twenty feet apart, and a large beam is laid from one to the other. The chiefs and principal men take their seats on the platforms, and then every man of the party in turn approaches this beam, the fighting leader, who is usually not one of the chiefs, coming first. If he is willing to go through with the business, I.E. to take part in the attack, he slashes a chip from the beam with his PARANG and passes under it. On the far side of the beam stands a chief holding a large frond of fern, and, as each man passes under, he gives him a bit of the leaf, while an assistant cuts a notch on a tally—stick for each volunteer. If for any reason any man is reluctant to go farther, he states his excuse, perhaps a bad dream or illness, or sore feet, and returns to the boats, amid the jeers of those who have passed the ordeal, to form one of a party to be left in charge of the camp and boats.

Next, all the left—handed men are sorted out to form a party whose special duty is to ambush the enemy, if possible, at some favourable spot. These are known as the hornets (SINGAT). If any swampy ground or other obstruction intervenes between their camp and the enemy's village, a path is made through or over it to facilitate retreat to the boats. A password is agreed upon, which serves as a means of making members of the party known to one another upon any chance meeting in the dark.

Scouts are sent out at dusk and, if their reports are favourable, the attack is made just before dawn. About half the warriors are provided with large bundles of dry shavings, and some will carry torches. When the attacking party has quietly surrounded the house or houses, the bundles of shavings are ignited, and their bearers run in and throw them under the house among the timbers on which it is supported. Then ensues a scene of wild confusion. The calm stillness of the tropical dawn is broken by the deep war—chorus of the attacking party, by the shouts and screams of the people of the house suddenly roused from sleep, by the cries and squeals of the frightened animals beneath the house, and the beating of the alarm signal on the TAWAK. If the house is ignited, the encircling assailants strive to intercept the fleeing inhabitants. These, if the flames do not drive them out before they have time to take any concerted measures, will hurl their javelins and discharge their firearms (if they have any) at their assailants; then they will descend, bringing the women and children with them, and make a desperate attempt to cut their way through and escape to the jungle or, sometimes, to their boats. Kayans conducting a successful

attack of this kind will make as many prisoners as possible, and will as a rule kill only those men who make desperate resistance, though occasionally others, even women and children, may be wantonly killed in the excitement of the moment. It is not unusual in the case of an able-bodied man who has surrendered, but shown signs of attempting to escape or of renewing his resistance, to deal him a heavy blow on the knee-cap, and so render him lame for some time. It usually happens that the greater part of the fugitives escape into the jungle; and they are not pursued far, if the victors have secured a few heads and a few prisoners. The head is hacked off at once from the body of any one of the foe who falls in the fight; the trunk is left lying where it fell. If any of the assailants are killed in the course of the fray, their heads are not taken by their friends, and their corpses are left upon the field covered with boughs, or at most, in the case of chiefs, are dragged into the jungle and covered up with boughs and twigs, in order to prevent their heads being taken by the enemy. If any of the enemy remain so badly wounded that they are not likely to recover, their heads are taken; and if no other heads have been secured, the head of one of the more seriously wounded captives is taken, or of one who is deformed or incapacitated in any way. If a captive dies of his wounds his head is taken; but it is a rare exception for Kayans to kill any of their captives after the short excitement of the battle is over. The attacking party, even though it has gained a decisive victory, usually returns with all speed, but in good order, to its boats, carrying with it through the jungle all the loot that is not too cumbersome for rapid portage, especially old beads, gongs, and brass-ware; for they are always in danger of being cut off by a party of their enemies, rallied and reinforced by parties from neighbouring friendly villages. Still more are they liable to be pursued and cut off, if the attack on the village has failed through the defenders having been warned; for an attack upon a strong house or village has little chance of success if the defenders are prepared for and expecting it. The pursuit of the retreating party may be kept up throughout one or two days, and, if the pursuers come up with them, a brisk and bloody battle is the natural outcome; and it is under these circumstances that the most severe fighting takes place. But here again it is seldom that any large proportion of either party is slain; for the dense jungle everywhere offers abundant opportunities of concealment to those who condescend to seek its shelter, and there are few, even among the Kayans and Kenyahs, who will fight to the bitter end, if the alternative of flight is open to them.

A successful war-party returning home makes no secret of its success. The boats are decorated with palm leaves (DAUN ISANG), and a triumphal chorus is raised from time to time, especially on passing villages. As the villagers come out to gaze on them, those who have taken heads stand up in the boats. The heads, slightly roasted, are wrapped up in palm leaves and placed in baskets in the stern of the boat. If the return home involves a journey of several days, the victors will, if possible, pass the nights in the houses of friendly villages, where they are made much of, especially those who have taken heads; and on these occasions the glamour of victory is apt to turn the heads of some of the women and to break down the reserve that modesty normally imposes upon them.

On approaching their own village, whither the rumour of their success usually precedes them, the war-party is received with loud acclamations, the people coming down to the riverside to receive them. Before they ascend to the house, the heads have to be safely lodged in a small hut specially built for their reception; and the young boys are brought down to go through their first initiation in the arts of war. Each child is made to hold a sword and, with the assistance of some aged warrior, to strike a blow at one of the newly captured heads. The older boys, some nine or ten years of age, who are ripe for their second participation in mock warfare, also strike at a head in a similar way, but engage also in mimic battles with one another, using wooden swords and spears, and, curiously enough, small roughly made bows and arrows.[59] It is customary for the victorious warriors to spend the first night after their return encamped before the house. A strip of green DAUN ISANG is tied about the left wrist of each man who has taken part in the expedition, and also of each of the young boys. Those who have taken heads adorn also their war-caps with the same leaf and with feathered sticks. On the following day a tall post of bamboo (BALAWING) is erected near the figure of the war-god. It is covered with frayed palm leaves (DAUN ISANG), and from its tip a single head, also wrapped in leaves, is suspended by a long cord (Pl. 66). Before the altar-post of the war-god several shorter thicker posts are erected, and to each of these two or three small pieces of human flesh, brought home from the corpses of the slain enemies for this purpose, are fastened with skewers. These pieces of flesh seem to be thank-offerings to the hawks to whom the success is largely attributed. These bits of flesh are dried over a fire at the first opportunity on the return journey, in order to preserve them.[60]

As soon as the news of the taking of heads reaches the house, the people go out of mourning, I.E. they shave the parts of the scalp surrounding the crown and pull out eyebrows and eyelashes (which have been allowed to



grow during mourning); they put off their bark-cloth garments and resume their cotton-cloths and ornaments.

If, as is usually the case on the return of a war-party, mourning for a chief is to be terminated, one of the heads is carried down river to his tomb, followed by most of the men, while the women wail in the house. The head is first brought before the house, but not into it. An old man shoots a dart into the air in the direction of the enemy, and then, pattering out a long formula in the usual way, he slaughters a fowl and puts a part of the carcase upon a short stick thrust into the earth. The men of the party then march past, each touching the carcase with his knee, and saying as he does so, "Cast out sickness, make me strong and healthy, exalt me above my enemies, etc. etc." Beside the tomb a tall pole is set up, and the head dressed in leaves is suspended by a cord from its upper end. A number of pigs will already have been slain in preparation for the feast, and their lower jaws are hung about the tomb on poles. The deep war-chorus is shouted by the party as it travels to and from the tomb. In returning the whole party bathes in the river, and while they are in the water an old man waves over them some of the ISANG leaves with which the head has been decorated, wishing them health and long life.

A few days (not less than four) after the return of the war-party, the heads are brought into the house with much rejoicing and ceremony. Every family kills a pig and roasts its flesh,[61] brings out stores of rice-spirit, and prepares cakes of rice-flour. The pigs' livers are examined, and their blood is smeared upon the altar-post of the war-god with a sort of brush (PLA) made by fraying the end of a stick in a more than usually elaborate manner. Each head, adorned with a large bunch of DAUN ISANG, is carried by an elderly man or woman into the house, followed by all the people of the house — men, women, and children — in long procession. The procession marches up and down the whole length of the gallery many times, the people shouting, singing, stamping, and pounding on the floor with PADI pestles, or playing the KELURI. This is followed by a general feast and drinking bout, each family preparing its feast in its own chamber, and entertaining friends and neighbours who come to take part in the general rejoicing. In the course of the feasting the women usually take temporary possession of the heads, and perform with them a wild, uncouth dance, waving the heads to and fro, and chanting in imitation of the men's war-song (Pl. 102). The procession may be resumed at intervals until the heads are finally suspended beside the old ones over the principal hearth of the gallery. The heads have usually been prepared by removal of the brain through the great foramen, by drying over a fire, and by lashing on the lower jaw with strips of rattan. The suspension of the head is effected by piercing a round hole in the crown, and passing through it from below, by way of the great foramen, a rattan knotted at the end. The free end of the rattan is passed through and tied in a hole in the lower edge of a long beam suspended parallel to the length of the gallery from the beams of the roof (Pl. 68). The Kenyahs suspend the heads in the same way as the Kayans, but most of the Klemantans and Ibans use in place of the long beam a strong basket-work in the shape of a cone, the apex being attached to the roof beams, and the heads tied in two or three tiers in the wall of the cone. In either case the heads hang some five or six feet above the floor, where they are out of reach of the dogs.

#### Defence

Since every Bornean long-house is, or until recently was, liable at almost any time to a night attack of the kind described above, the situation of the house is chosen with an eye to defence. The site chosen is in nearly all cases on the bank of a river or stream large enough for the navigation of small boats; a high and steep river-bank is commonly preferred; and spits of land between two converging streams or peninsulas formed by sharp bends of the rivers are favoured spots.

Beside the natural situation, the prime defence of the house is its elevation some 10 to 30 feet above the level of the ground, joined with the difficulty of access to the house by means of narrow ladders easily drawn up or thrown down. This elevation of the house serves also to secure its contents against sudden risings of the river, and also against the invasion of evil odours from the refuse which accumulates below it; but its primary purpose is undoubtedly defence against human enemies. The interval between the low outer wall of the gallery and the lower edge of the roof is the only aperture through which missiles can be hurled into the house, and this is so narrow as to render the entry of any missiles well-nigh impossible.

When a household gets wind of an intended attack, they generally put the house into a state of defence by erecting a fence of vertical stakes around it, some three yards outside the posts on which it is supported and some six to eight feet in height. This fence is rendered unclimbable by a frieze consisting of a multitude of slips of bamboo; each of these is sharpened at both ends, bent upon itself, and thrust between the poles of the palisade so that its sharp points (Pl. 100) are directed outwards. This dense jungle of loosely attached spikes constitutes an

obstacle not easily overcome by the enemy; for the loosely fitting bamboo slips can neither be hacked away nor removed individually without considerable expenditure of time, during which the attackers are exposed to a shower of missiles from the house. A double ladder in the form of a stile is placed across the fence to permit the passage of the people of the house. If there is any definite pathway leading to the house, a log is sometimes suspended above it by a rattan passing over a branch of a tree and carried to the house. This can be allowed to fall upon the approaching enemy by severing the rattan where it is tied within the house (Klemantan).

A further precaution is to stick into the ground round about the house a large number of slips of bamboo. Each slip is some six inches in length, and its sharp, fire-hardened point projects upwards and a little outwards.

If the attacking party is likely to approach by the river, a trap may be arranged at some point where, by reason of rapids or rocks, the boats are likely to be delayed. Here a large tree overhanging the river is chosen for the trap. Stout rattans are made fast to its branches, brought over the branches of a neighbouring tree, and made fast in some spot within reach of a hidden watcher. The stem of the overhanging tree is then cut almost through, so that a few blows of a sword, severing the supporting rattans, may cause the tree to fall upon the passing boat.

When a hostile war-party enters a section of a river in which there is a number of villages of one tribe or of friendly tribes, its approach may be signalled throughout the district by the beating of the TAWAK. The same peculiar rhythm is used for this purpose by all the tribes, though it probably has been copied from the Kayans by all the others. It consists in a rapid series of strokes of increasing rate upon the boss, followed by one long deep note, and two shorter ones struck upon the body and once repeated. Whenever this war-alarm is heard in a village, it is repeated, and so passed on from village to village. The people working in the farms or in the jungle, or travelling on the river, return at once to their villages on hearing the alarm, and the houses are prepared for defence. When the news of the approach of a hostile party has been spread in this way throughout the river, it has little chance of successfully attacking a house or village, and it will, unless very numerous, content itself with attempting to cut off some of the people returning home from the farms. If the invading party is very strong, it may surround a house whose defenders have been warned of their coming, and attempt to starve them into submission. In the old days it was not uncommon for a strong party of Kayans to descend upon a settlement of the more peaceable coastwise people, and to extort from them a large payment of brass-ware as the price of their safety. If the unfortunate household submitted to this extortion, the Kayans would keep faith with them, and would ratify a treaty of peace by making the headman of the village blood-brother of their chief.

Some features of the tactics adopted by the Kayans are worthy of more detailed description. If a strong party determines to attack a house in face of an alert defence, they may attempt to storm it in broad daylight by forming several compact bodies of about twenty-five men. Each body protects itself with a roof of shields held closely together, and the several parties move quickly in upon the house simultaneously from different points, and attempt to carry it by assault. The defenders of the house would attempt to repel such an attack by hurling heavy bars of iron-wood, sharpened at both ends, in such a way that the bar twirls in the air as it hurtles through it; and this is one of the few occasions on which the blow-pipe is used as a weapon of defence.

A village that has been warned of the approach of the foe may send out a party to attempt to ambush the attackers at some difficult passage of the river or the jungle. Scouts are sent out to locate the enemy. Some climb to the tops of tall trees to look for the smoke of the enemy's fires. Having located the enemy, the scouts approach so closely as to be able to count their numbers and observe all their movements; and, keeping in touch with the party, they send messages to their chief. If the defenders succeed in ambushing the attackers and in killing several of them, the latter usually withdraw discouraged, and may for the time give up the attempt. If the defending party should come upon the enemy struggling against a rapid, and especially if the enemy is in difficulties through the upsetting of some of their boats, or in any other way, they may fall upon them in the open bed of the river, and then ensues the comparatively rare event, a stand-up fight in the open. This resolves itself in the main into hand-to-hand duels between pairs of combatants, as in the heroic age. The warriors select their opponents and approach warily; they call upon one another by name, hurling taunts and swaggering boastfully in the heroic style. Each abuses the other's parents, and threatens to use his opponent's skin as a war-coat, or his scrotum as a tobacco-pouch, to take his head and to use his hair as an ornament for a PARANG-handle; or doubt as to the opponent's sex may be insinuated. While this exchange of compliments goes on, the warriors are manoeuvring for favourable positions; each crouches, thrusting forward his left leg, covering himself as completely as possible with his long shield, and dodging to and fro continually. The short javelins and spears are first hurled, and

skilfully parried with spear and shield. When a man has expended his stock of javelins and has hurled his spear, he closes in with his PARANG. His enemy seeks to receive the blow of the PARANG on his shield in such a way that the point, entering the wood, may be held fast by it. Feinting and dodging are practised; one man thrusts out his left leg to tempt the other to strike at it and to expose his head in doing so. If one succeeds in catching his enemy's PARANG in his shield, he throws down the shield and dashes upon his now weaponless foe, who takes to his heels, throwing away his shield and relying merely on his swiftness of foot. When one of a pair of combatants is struck down, the other springs upon him and, seizing the long hair of the scalp and yelling in triumph, severs the neck with one or two blows of the PARANG. The warrior who has drawn first blood of the slain foe claims the credit of having taken his head. Such a free fight seldom lasts more than a few minutes. Unless one party quite overwhelms the other in the first few minutes, both draw off, and the fight is seldom renewed.

Since the establishment of the European governments in Borneo, punitive expeditions have been necessary from time to time in order to put a stop to wanton raiding and killing. In this respect the Ibans and some of the Klemantans have been the chief offenders; while the Kayans and Kenyahs have seldom given trouble, after once placing themselves under the established governments. In the Baram river, in which the Kayans form probably a larger proportion of the population than in any other, no such expedition against them has been necessary since they accepted the government of H.H. the Rajah of Sarawak nearly twenty-five years ago.

In organising such an expedition, the European governments, especially that of Sarawak, have usually relied in the main on the services of loyal chiefs and their followers, acting under the control of a European magistrate, and supported usually by a small body of native police or soldiers armed with rifles. There is usually no difficulty in securing the co-operation of any desired number of native allies or volunteers; for in this way alone can the people now find a legitimate outlet for their innate and traditional pugnacity. Sometimes the people to be punished desert their village, hiding themselves in the jungle; and in such cases the burning of their houses is usually deemed sufficient punishment. In cases of more serious crime, such as repeated wanton bloodshed and refusal to yield to the demands of the government, it becomes necessary to apprehend the persons primarily responsible, and, for this purpose, to pursue the fugitives. These sometimes establish themselves on a hill-top surrounded by precipices which can be scaled only by the aid of ladders, and there defy the government forces until the hill is carried by assault, or by siege, or the defenders are enticed to descend. One such hill in the basin of the Rejang (Sarawak), Bukit Batu by name, consists of a mass of porphyry some 1500 feet in height, and several miles in diameter, with very precipitous sides. This has been used again and again as a place of refuge by recalcitrant offenders, being so strong a natural fortress that it has never been possible to carry it by assault. On the last occasion on which Bukit Batu was used in this way, two Iban chiefs established themselves on the hill and defied the government of Sarawak for a period of four years, during which the hill became a place of refuge for all evil-doers and outlaws among the Ibans of the Rejang and neighbouring districts, who built their houses on ledges of the mountain some four hundred feet above the level of the river.

The punitive expedition that we briefly describe in Chapter XXII. was but a small affair compared with some, in which as many as 10,000 or 12,000 men have mustered under the government flag. So large a number is seldom necessary or desired by the government; but when contingents from all the loyal communities of a large district eagerly offer their services, it is difficult to deny any of them permission to take part. Kenyahs and Kayans will co-operate harmoniously, and also Klemantans; but the former distrust the Sea Dayaks and will not join forces with any large number of them.

The modes of warfare of the other tribes are similar in most respects to that of the Kayans described above; but some peculiarities are worthy of note.

Kenyah warfare is very similar to Kayan, save in so far as their more impetuous temper renders their tactics more dashing. While the Kayans endeavour to make as many captives as possible, the Kenyahs attach little value to them. While Kayans never attack communities of their own tribe, such "civil war" is not unknown among the Kenyahs, whose tribal cohesion is less intimate in many respects. From these two differences it results that the Kenyah war-parties are generally smaller than those of the Kayans, more quick-moving, and more prone to attack groups of the enemy encountered on farms or on the river. Like the Ibans, the Kenyahs make peace more readily than the Kayans, who nurse their grievances and seek redress after long intervals of time.

The Ibans conduct their warfare less systematically, and with far less discipline than the Kayans and Kenyahs.

An attack upon a house or village by Ibans is usually made in very large force; the party is more of the nature of a rabble than of an army; each man acts independently. They seek above all things to take heads, to which they attach an extravagant value, unlike the Kayans and Kenyahs who seek heads primarily for the service of their funeral rites; and they not infrequently attack a house and kill a large number of its inmates in a perfectly wanton manner, and for no other motive than the desire to obtain heads. This passion for heads leads them sometimes into acts of gross treachery and brutality. The Ibans being great wanderers, small parties of them, engaged perhaps in working jungle produce, will settle for some weeks in a household of Klemantans, and, after being received hospitably, and sometimes even after contracting marriages with members of the household, will seize an opportunity, when most of the men of the house are from home, to take the heads of all the men, women, and children who remain, and to flee with them to their own distant homes.

So strong is this morbid desire of the Ibans to obtain human heads, that a war-party will sometimes rob the tombs of the villages of other tribes and, after smoking the stolen heads of the corpses, will bring them home in triumph with glowing accounts of the stout resistance offered by the victims. Their attitude in this matter is well expressed by a saying current among them, namely, "Why should we eat the hard caked rice from the edge of the pot when there's plenty of soft rice in the centre?" The Iban women urge on the men to the taking of heads; they make much of those who bring them home, and sometimes a girl will taunt her suitor by saying that he has not been brave enough to take a head; and in some cases of murder by Sea Dayaks, the murderer has no doubt been egged on in this way.

Nevertheless, we repeat that there is no ground for the oft-reprinted assertion that the taking of a head is a necessary prelude to marriage.[62] Like other tribesmen Ibans do not bring home the heads of their companions who have fallen in battle; but while men of other tribes are content to drag the corpses of their fallen friends into some obscure spot and to cover them with branches, Ibans frequently cut off the heads and bury them at a distance from the scene of battle, in order to prevent their being taken by the enemy.

The Ibans use a rather greater variety of weapons than the Kayans, in that they have spears whose blades bear barbs which prevent the withdrawal of the blade from the body of the enemy without great violence.

The Klemantan tribes are on the whole far less warlike than Kayans, Kenyahs, and Ibans. Their offensive warfare is usually on a small scale, and is undertaken primarily for revenge. Their warlike ambition is easily satisfied by the taking of a single head, or even by a mere hostile demonstration against the enemy's house. Nevertheless, like all the other tribes, except the Punans, the Klemantans need a human head to terminate a period of mourning.

We venture to append to this chapter a few speculations on the origin and history of head-hunting. From what we have said above it is clear that the Ibans are the only tribe to which one can apply the epithet head-hunters with the usual connotation of the word, namely, that head-hunting is pursued as a form of sport. But although the Ibans are the most inveterate head-hunters, it is probable that they adopted the practice some few generations ago only (perhaps a century and a half or even less) in imitation of Kayans or other tribes among whom it had been established for a longer period. The rapid growth of the practice among the Ibans was no doubt largely due to the influence of the Malays, who had been taught by Arabs and others the arts of piracy, and with whom the Ibans were associated in the piratical enterprises that gave the waters around Borneo a sinister notoriety during the eighteenth and first half of the nineteenth centuries. Until the middle of the nineteenth century, the settlements of Ibans were practically confined to the rivers of the southern part of Sarawak; and there the Malays of Bruni and of other coast settlements enlisted them as crews for their pirate ships. In these piratical expeditions the Malays assigned the heads of their victims as the booty of their Iban allies, while they kept for themselves the forms of property of greater cash value. The Malays were thus interested in encouraging in the Ibans the passion for head-hunting which, since the suppression of piracy, has found vent in the irregular warfare and treacherous acts described above. It was through their association with the Malays in these piratical expeditions that the Ibans became known to Europeans as the Sea Dayaks.

It seems not impossible that the practice of taking the heads of fallen enemies arose by extension of the custom of taking the hair for the ornamentation of the shield and sword-hilt. It seems possible that human hair was first applied to shields in order to complete the representation of a terrible human face, which, as we have seen, is commonly painted on the shield, and which is said to be valued as an aid to confusing and terrifying the foe. It is perhaps a difficulty in the way of this view that the use of human hair to ornament the shield is peculiar

to the Kenyahs and some of the Klemantans (the latter probably having imitated the former in this), and does not occur among the Kayans. The Kenyahs themselves preserve the tradition of the origin of the taking of heads; and the suggestion is further borne out by the legend of TOKONG, which is widely known, but is probably of Kenyah origin (see Chapter XVII.), according to which the frog admonished a great Kenyah chief that he should cease to take only the hair of the fallen foe, but should take their heads also.

A second plausible view of the origin of head-taking is that it arose out of the custom of slaying slaves on the death of a chief, in order that they might accompany and serve him on his journey to the other world. We have pointed out several reasons for believing that this practice was formerly general, and that it has fallen into desuetude, but is hardly yet quite extinct. It is obvious that since the soul of the dead man is regarded as hovering in the neighbourhood of the body for some little time after its death, it would be felt that the despatch of a companion soul was not a matter of immediate urgency; and considerations of economy might well lead the mourners to prefer capturing and killing members of some hostile community to slaying one or more of their slaves, highly valued and sometimes affectionately regarded as they are. It would then be felt that the relatives of the deceased should continue to display signs of mourning until they should have discharged this last duty to their departed friend. The next step would be to supplant the practice of capturing a member of a hostile community, and bringing him home to be slain, by the simpler, less troublesome, and more merciful one of slaying the enemy on the field of combat and bringing home only his head. In this way we may, with some plausibility, seek to account for the origin of the practice of taking heads, and of the tradition that the taking of a head is necessary for the termination of a period of mourning. This second suggestion is strongly supported by the fact that Kayans, Kenyahs, and Klemantans occasionally, on returning home from a successful raid, will carry one of the newly taken heads to the tomb of the chief for whom they are mourning, and will hang it upon, or deposit it within, the tomb beside the coffin. The head used for this purpose is thickly covered with leaves (DAUN ISANG) tied tightly about it. It is possible that this thick covering was first applied in order to disguise the fact that the head is that of an enemy, and that the sacrifice of the life of a domestic slave, originally demanded by custom and piety, has been avoided by this process of substitution.

We have suggested above two different origins of the custom of taking the heads of enemies. These two possibilities are by no means mutually exclusive, and we are inclined to think that both substitutive processes may have co-operated in bringing about this custom.

It seems probable that the taking of heads was introduced to Borneo by Kayans when they entered the island, probably some few centuries ago, and that the Klemantans and other tribes, like the Ibans, have adopted the custom from their example.

We will conclude this chapter by questioning yet another of the stories, the frequent repetition of which has given the tribes of the interior the reputation of being savages of the worst type, namely, the story that it is the practice of Kayans to torture the captives taken in battle. This evil repute is, we have no doubt, largely due to the fact that very few Europeans have acquired any intimate first-hand acquaintance with the Kayans or Kenyahs; and that too often the stories told by Sea Dayaks have been uncritically accepted; for the Sea Dayaks have been bitterly hostile to the Kayans ever since the tribes have been in contact; and the Iban is a great romancer. It will be found that many of the alleged instances of torture by Kayans have been described by Sea Dayaks; and we think there is good reason for hesitating to accept any of these. But we would point out that, if some of these accounts have been founded on fact, the Sea Dayak victims, or their companions, have in all probability provoked the Kayans to severe reprisals by their atrocious behaviour, and may be fairly said to have deserved their fate.

It is true that Kayans have been guilty of leaving a slave or captive bound upon a tomb until he has died from exposure to the sun. We know also of one instance in which a Murut slave, having treacherously murdered the only son of a great Kayan chief in the Baram, at the instigation of Bruni Malays, was killed by a multitude of small stabs by the infuriated Kayan women, on being brought captive to the house.

But such occurrences as these by no means justify the statement that it is the practice of Kayans to torture their captives; and we have heard of no well-attested instances that give any colour to it. As we have said above, Kayans commonly treat their captives so kindly that they soon become content to remain in the households of their captors. The Kayan feeling about torture is well illustrated by the fact that the Kayan village responsible for the exposure of the slave mentioned above was looked at askance by other Kayans. The spot was regarded with horror by them, and they regard as a consequence of this act the failure of the line of the chief of that village to

perpetuate itself.

We have to admit that some of the Klemantans cannot be so whole-heartedly defended against the charge of torturing their captives. But we believe that it is not regularly practised by any Klemantan tribe, but rather only on occasions which in some way evoke an exceptional degree of emotional excitement. Thus, in one instance known to us, the Orang Bukit of the Bruni territory, having lost the most highly respected of their chiefs, purchased a slave in Bruni to serve as the funereal victim, and, having shut him in a wicker cage, killed him with a multitude of stabs, some eight hundred persons taking part in the act. But even this act was, it must be observed, of the nature of a pious and religious rite rather than an act of wanton cruelty.

We cannot leave this subject without this last word. If we are quite frank, we shall have to admit that, even though the worst accounts of Kayan cruelty were substantially true, such behaviour would not in the least justify the belief that the Kayans are innately more cruel than ourselves. If we are tempted to take this view, let us remember that, after our own race had professed Christianity for many generations, the authority of Church and State publicly decreed and systematically inflicted in cold blood tortures far more hideous and atrocious than any the Kayan imagination has ever conceived.

## CHAPTER 11. Handicrafts

In any account of the arts and crafts of the Kayans, the working of iron claims the first place by reason of its high importance to them and of the skill and knowledge displayed by them in the difficult operations by which they produce their fine swords. The origin of their knowledge of iron and of the processes of smelting and forging remains hidden in mystery; but there can be little doubt that the Kayans were familiar with these processes before they entered Borneo, and it is probable that the Kayans were the first ironworkers in Borneo, and that from them the other tribes have learnt the craft with various measures of success.[63] However this may be, the Kayans remain the most skilful ironworkers of the country, rivalled only in the production of serviceable sword-blades by the Kenyahs.

At the present day the Kayans, like all the other peoples, obtain their iron in the form of bars of iron and steel imported from Europe and distributed by the Chinese and Malay traders. But thirty years ago nearly all the iron worked by the tribes of the interior was from ore found in the river-beds, and possibly from masses of meteoric iron; and even at the present day the native ore is still smelted in the far interior, and swords made from it by the Kenyahs are still valued above all others.

Smelting and forging demand a specialised skill which is attained by relatively few. But in each Kayan village are to be found two or three or more skilled smiths, who work up for a small fee the metal brought them by their friends, the finishing touches being generally given by the owner of the implement according to his own fancy.

The smelting is performed by mixing the ore with charcoal in a clay crucible, which is embedded in a pile of charcoal. The charcoal being ignited is blown to a white heat by the aid of four piston-bellows. Each of the bellows consists of a wooden cylinder (generally made from the stem of a wild sago palm) about four feet in length and six inches in diameter, fixed vertically in a framework carrying a platform, on which two men sit to work the pistons (see Pl. 107). The lower end of each cylinder is embedded in clay, and into it near its lower end is inserted a tube of bamboo, which, lying horizontally on the ground, converges upon and joins with a similar tube of a second cylinder. The common tube formed by this junction in turn converges with the tube common to the other pair of cylinders, and with it opens by a clay junction into a final common tube of clay, which leads to the base of the fire. The piston consists of a stout stick bearing at its lower end a bunch of feathers large enough to fill the bore of the cylinder. When the piston is thrust downwards, it drives the air before it to the furnace; as it is drawn upwards, the feathers collapsing allow the entrance of air from above. The upper extremity of each of the piston-rods is attached by a cord to one end of a stout pliable stick, which is firmly fixed at its other end in a horizontal position, the cord being of such a length that the piston-head is supported by it near the upper end of the cylinder. Two men squat upon the platform and each works one pair of the cylinders, grasping a piston-rod in each hand, thrusting them down alternately, and allowing the elastic reaction of the supporting rods above to draw them up again. The crucible, having been brought to white heat in the furnace, is allowed to cool, when a mass of metallic iron or steel is found within it.

The forging of implements from the metal obtained is effected by the aid of a charcoal furnace to which a blast is supplied by the bellows described above, or sometimes by one consisting of two cylinders only. Stone anvils and hammers were formerly used, and may still be seen in use in the far interior (Fig. 31); but the Kayans make iron hammers and an anvil consisting of a short thick bar of iron, the lower end of which is fixed vertically in a large block of wood.

The peculiarly shaped and finely tempered sword-blade, MALAT, is the highest product of the Kayan blacksmith. The smith begins his operations on a bar of steel some eight inches in length. One end is either grasped with pincers, or thrust firmly into a block of wood that serves for a handle. The other end is heated in the furnace and gradually beaten out until the peculiar shape of the blade is achieved, with the characteristic hollow on the one side and convexity on the other. If the blade is to be a simple and unadorned weapon, there follow only the tempering, grinding, and polishing. But many blades are ornamented with curled ridges projecting from the back edge. These are cut and turned up with an iron chisel while the metal is hot and before tempering.

Two methods of tempering are in use. One is to heat the blade in the fire and to plunge it at a dull heat into water. The other is to lay the cold blade upon a flat bar of red-hot iron. This has the advantage that the degree of the effect upon the blade can be judged from the change of its colour as it absorbs the heat. The Kayan smiths are expert in judging by the colours of the surface the degree and kind of temper produced. They aim at producing a very tough steel, for the MALAT has to serve not only in battle, but also for hacking a path through the jungle, and for many other purposes.

Many sword-blades are elaborately decorated with scroll designs along the posterior border and inlaid with brass. The inlaid brass commonly takes the form of a number of small discs let into the metal near the thick edge; small holes are punched through the hot metal, and brass wire is passed through each hole, cut off flush with the surface and hammered flat. The designs are chased on the cold metal with a chisel and hammer supplemented by a file. The polishing and sharpening are done in several stages: the first stage usually by rubbing the blade upon a block of sandstone; the second stage by the use of a hone of finer grain; and the highest polish is attained by rubbing with a leaf whose surface is hard and probably contains silicious particles. At the present time imported files are much used.

Other implements fashioned by the smiths are the small knives, spear-heads, hoes, small adzes, rods for boring the sumpitan, the anvil, and the various hammers, and chisels, and rough files used by the smiths.

### Brass-work

Although brass-ware is so highly valued by all the peoples of the interior, the only brazen articles made by them (with one exception presently to be noticed) are the heavy ear-rings of the women. The common form is a simple ring of solid metal interrupted at one point by a gap about an eighth of an inch wide, through which is pulled the thin band of skin formed by stretching the lobule of the ear. Other rings form about one and a half turns of a corkscrew spiral. These rings are cast in moulds of clay, or in some cases in moulds hollowed in two blocks of stone which are nicely opposed.

The Malohs, a Klemantan sub-tribe in the upper basin of the Kapuas river, are well known as brass-workers; their wares are bartered throughout the country, and a few Maloh brass-workers may be found temporarily settled in many of the larger villages of all tribes. They make the brass corsets of the Iban women, tweezers for pulling out the hair of the face, brass ear-rings, and a variety of small articles, and they make use of the larger brass-ware of Malay and Chinese origin as the source of their material.

### Fire Piston

This very ingenious instrument for the making of fire is cast in metal by the Ibans. (See Fig. 36 and Pl. 108.) It consists of a hollow brass or leaden cylinder about five inches in length and one inch in diameter, the bore being about one-quarter of an inch in diameter and closed at one end. A wooden piston, which closely fits the bore, bears a rounded knob; it is driven down the cylinder by a sharp blow of the palm upon the knob and is quickly withdrawn. The heat generated by the compression of the air ignites a bit of tinder (made by scraping the fibrous surface of the leaf stem of the Arenga palm) at the bottom of the cylinder. The cylinder is cast by pouring the molten metal into a section of bamboo, while a polished iron rod is held vertically in the centre to form the bore. When the cylinder is cold the iron rod is extracted, and the outer surface is trimmed and shaped with knife or file.

### Boat-building

The Kayans make much use of boats, as described in Chapter VIII., and are skilful boat-makers. The forest offers them an abundant variety of timbers suitable for the different types of boat used by them.

The most ambitious efforts of this kind are devoted to the construction of the great war-boats, fine specimens of which are as much as 100 feet in length, or even, in exceptional instances, nearly 150 feet. The foundation of every boat is a single piece of timber shaped and hollowed by fire and adze. Several kinds of timber are used, the best being the kinds known as AROH (SHOREA) and NGELAI (AFZELIA PALAMBANICA). Sometimes a suitable stem is found floating down river and brought to the bank before the house. But such good fortune is exceptional, and commonly a tree is selected in the forest as near as possible to the river bank. The tree is felled in the way described in Chapter VI. (Pl. 55), its branches are hewed away, and the stem is cut to the required length and roughly hewn into shape. About one-fourth of the circumference of the stem is cut away along the whole length, and from this side the stem is hollowed. When, by chopping out the centre, the thickness of this shell has been reduced to a thickness of some five inches, it is brought down to the river. This is effected by laying through the jungle a track consisting of smooth poles laid across the direction of progress; the hollowed stem is pulled



endwise over this track with the aid of rattans, perhaps a hundred or more men combining their strength. If the stem proves too heavy to be moved at any part of the journey by their direct pull and push, a rough windlass is constructed by fixing the stem of a small tree across two standing trees and winding the rattans upon this, the trimmed branches of the tree serving as the arms of the windlass. The Kayans are skilled in this kind of transport of heavy timber; for the building of their houses and of the larger tombs involves similar difficulties, though the timbers required for these purposes are not so huge as those used for the war-boats. Arrived at the river bank, the hollowed stem is launched upon the water and towed down stream to the village at a time when the water is high. It is made fast to the bank before the village at as high a point as the water will allow, so that when the river subsides it is left high and dry. A leaf shelter is then built over it to protect it and the workers from the sun. The shell is then further hollowed, partly by firing it with shavings inside and out, and by scraping away the charred surfaces. The inside is fired first; then the hollow is filled with water, and the outside is fired.

When in this way the shell has been reduced to a thickness of a few inches, it is opened out, while hot from firing and still filled with water, by wedging stout sticks some six to seven feet in length between the lateral walls, so that the hollow stem (which hitherto has had the form of a hollow cylinder some three to four feet in diameter, lacking along its whole length a strip about the fourth of its circumference) becomes a shallow trough some six to seven feet wide in the middle of its length. During the hollowing, small buttresses are left along each side at intervals of about two feet to form supports for benches. After the opening, the shell is left lying covered with branches for some days, while the wood sets in its new form. The outer surface is then shaved approximately to the required degree, all irregularities are removed, and holes about half-an-inch in diameter are bored through all parts of the shell at intervals of some twenty inches. Wooden pegs are then hammered into these holes, each peg bearing two marks or grooves at an interval equal to the thickness of the shell desired at each part; the peg is driven in from the outside until the outer groove is flush with the outer surface of the shell, and the projecting part is cut away; the inner surface is then further chipped and scraped in each area until it becomes level with the inner groove on the peg. In this way the workers are enabled to give to each part its appropriate thickness. The outer surface is then finally smoothed to form about one-third of a cylinder, and the foundation is complete. It only remains to lash the cross-benches to their supports, to raise the sides by lashing on a gunwale, and to fit in wedge-shaped blocks at bow and stern. The gunwale consists of a tough plank some ten inches wide overlapping the outer edge of the shell, and lashed firmly to it by rattan strips piercing both shell and planks at intervals of about six inches. In some cases the gunwale is further raised in its middle part by lashing on a second smaller plank to the upper edge of the first. The block fitted in at the prow presents to the water a flat surface inclined at a low angle; and a similar block completes the shell at the stern. The prow is often ornamented with the head of a crocodile or the conventional dog's head carved in hard wood and painted in red and black.

The whole operation, like every other important undertaking, is preceded by the finding of omens, and it is liable to be postponed by the observation of ill omens, by bad dreams, or by any misfortune such as a death in the house. In each house are certain men who are specially skilled in boat-making, and by them the work is directed and all the finer part of the work executed. In the case of a war-boat which is to be the property of the household, these special workers are paid a fee out of the store of valuables accumulated under the care of the chief by way of fines and confiscations.

The smaller boats, ranging from a small canoe suitable for one or two paddlers only, to one capable of carrying a score or more, are generally private property. These, like the war-boats, are made from a single stem. The larger ones are made in just the same way as the war-boats. In the smaller ones the bow is shaped from the solid block and is not opened out, as is the rest of the boat. The craftsman who makes a boat for another is helped by his customer, and is paid by him a fee in brass-ware or dollars, the usual fee being a TAWAK varying in size according to the size of the boat.

If Kayans find themselves for any reason in immediate need of a boat when none is at hand, they sometimes fashion one very rapidly by stripping the bark from a big tree. The two ends of the sheet of bark are folded and lashed with rattan to form bow and stern; the middle part is wedged open with cross-pieces which serve as benches, and the shell is strengthened with transverse ribs and longitudinal strips. A serviceable boat capable of carrying several men and their baggage may be completed in the course of two hours. Such a makeshift boat is more commonly made by Sea Dayaks.

Of all the interior tribes the Kayans are probably the best boat-makers; but most of them make their own

boats in the same way as the Kayans. There are, however, a few of the Klemantan sub-tribes who never attempt to make anything more than a very rough small canoe of soft wood, and who buy from others what boats they need. This is a curious instance of the persistent lack of the tradition of a specialised craft among communities that might have been expected to acquire it easily from their neighbours.

For ordinary work a rough paddle made from iron-wood is generally used; the blade and shaft are of one piece; the flat blade, nearly two feet in length, is widest about six inches below its junction with the shaft, and from this point tapers slightly to its square extremity; the shaft is about three feet in length and carries, morticed to its upper end, a cross-piece for the grip of the upper hand.

A few paddles, especially those made for women, are very finely shaped and finished, and have their shafts ornamented with carving of a variety of designs, generally one band of carving immediately above the blade and a second below the cross-piece. Some of the Klemantans excel the Kayans in this work, producing very beautiful women's paddles, sometimes with designs of inlaid lead (Pl. 92).

#### House-building

A Kayan community seldom continues to inhabit the same spot for more than about a dozen years; though in exceptional instances houses are continuously inhabited for thirty or even forty years. House-building is thus a craft of great importance, and the Kayans are seldom content to build their houses in the comparatively flimsy style adopted by the Ibans and some of the Klemantans, and even occasionally by Kenyahs. The main features of the structure of a Kayan long-house have been described in Chapter IV. Here it remains only to describe some of the more peculiar and important processes of construction.

The great piles that support the house may be floated down river from the old house to be used in the construction of the new; [64] they are not dug from the ground, but are felled by cutting close to the surface of the ground. The great planks of the floor, the main cross-beams, and the wooden shingles of the roof, are also commonly carried from the old house to the new. If a house has been partially destroyed by fire, no part of the materials of the old house is used in the construction of the new; for it is felt that in some indefinable way the use of the old material would render the new house very liable to the same fate, as though the new house would be infected by the materials with the ill-luck attaching to the old house.[65] In such cases, or upon migration to a different river, the whole of the timbers for the house have to be procured from the jungle, and shaped, and erected; and the process of construction is extremely laborious. But once the timber has been brought together upon the chosen site, the building goes on rapidly, and the whole of a house some hundreds of yards in length may be substantially completed within a fortnight. The main supports of the structure are four rows of massive columns of iron-wood. Holes about four feet in depth are dug for the reception of the butt ends of these. They are disposed in the manner indicated in the diagrams (Figs. 37, 38, 39), so that a single row supports the front of the house, another the back, and a double row the middle.[66] The intervals between the columns of each row are about twenty feet, or rather more. Each pile is erected by raising the one end until the other slips into the hole. Rattans are tied round it a little above its middle and passed over a tall tripod of stout poles. A number of men haul on these while others shove up the top end with their shoulders. The pile is thus suspended with its butt end resting so lightly on the ground that it can easily be guided into the hole prepared for its reception. Smaller accessory piles, to serve as additional supports, are put under the main cross beams of the floor when these have been laid. The columns of the double row in the middle line are about six feet taller than those of the front and back rows. For the support of the floor a massive squared transverse tie is morticed through each set of four columns at a height of some fifteen to twenty feet from the ground, and secured by a pin through each extremity. A squared roof-plate, still more massive than the floor ties, is then laid upon the crowns of the columns of the front row, along its whole length, and a second one upon the back row. This is dowelled upon the columns (I.E. the top of the column is cut to form a pin which is let into the longitudinal beam); and the beams which make up the roof-plate are spliced, generally in such a way that the top of a column serves as the pin of the splice. Each of these heavy beams is generally lifted into its place by tiers of men standing on poles lashed at different heights across the columns, their efforts being seconded by others pulling on rattans which run from the beam over the topmost cross-pole. The framework of the roof is then completed by laying stout roof-ties across the crowns of the double row of columns of the middle line, and lashing their extremities to stout purlins (longitudinal beams for the support of the rafters in the middle of their length), and by laying the ridge-timber upon a line of perpendicular struts. The ridge-timber and purlins, though less heavy than the roof-plates, consist also of stout

squared timbers, spliced to form beams continuous throughout the whole length of the house. The rafters are laid at an angle of about forty degrees and at intervals of eighteen inches; they are lashed to the ridge-timber and to the purlins, and lipped on to the roof-plates, beyond which they project about four feet to form an eave. Strong flat strips or laths are laid along the rafters parallel to the length of the house at intervals of about sixteen inches. On these are laid the shingles or slats of iron-wood in regular rows, in just the way in which roof tiles are laid in this country. Each slat is a slab about 1 x 30 x 12 inches, and is lashed by a strip of rattan, which pierces its upper end, to one of the laths. The floor is completed by laying longitudinal joists of stout poles across the main floor-ties; the poles are notched to grip the ties. Upon these joists, transversely to them, are laid a number of flat strips which immediately support the floor planks; these are kept in place by their own weight.

In a well-built house these planks are between thirty and forty feet in length, or even more, two to three feet in breadth, and three to four inches thick. They are made from tough strong timber, but usually not from the iron-wood trees. They are moved from house to house, and some of those in use are probably hundreds of years old. A single tree is generally made to yield two such planks. After being felled it is split into halves longitudinally in the following way. A deep groove is cut along one side, and wedges of hard tough wood are driven in with rough heavy mallets. Deep transverse grooves are then cut in the rounded surface of each half at intervals of three or four feet; and the intervening masses of wood are split off. In this way it is whittled down until it is only some six inches thick. The plank is then trimmed down to the desired thickness by blows of the adze struck across the direction of the grain. The two ends are generally left untrimmed until the plank has been transported to the site of the house and has lain there for some time. This prevents its splitting during the journey to the house and the period of seasoning.

When the floor has been laid, it only remains to make the main partition wall which separates the gallery from the rooms along the whole length of the house, and the walls between the several rooms. These walls are made only some eight or nine feet in height. The wall of the gallery is made of vertical planks lashed to horizontal rails whose extremities are let into the columns of the anterior set of the double median row. The wall thus divides the house into a narrower front part, the gallery, and a broader back part; the latter is subdivided by the transverse walls into the series of rooms each of which accommodates one family.

The work of construction is carried on by all the men of the house; the women and children lend what aid they can in the way of fetching and carrying, and in preparing rattans. The ownership of each section is arranged beforehand; the section of the chief being generally in the middle, and those of his near relatives on either side of it. Each man pays special attention to the construction of his own section, and carries out the lighter work of that part, such as laying the shingles, with the help of his own household. If any widow is the head of a household, her section is constructed by her male neighbours or relatives without payment.

Before beginning the building of a new house favourable omens must be obtained; and the Kayans would be much troubled if bad omens were observed during the building, especially during the first few days. At this time, therefore, children are told off to beat upon gongs hung about the new site, and so, by scaring away the birds and obscuring the sound of their cries, to prevent the appearance of bad omens from their side. Bad omens combined with ill-luck, such as death, bad dreams, or an attack by enemies during building (even if this were successfully repelled), would lead to the desertion of a partially built house and the choice of another site.

All the interior peoples construct their houses on principles similar to those described above, but with considerable diversity in detail. The greatest diversity of plan is exhibited by the houses of Ibans. An Iban community seldom remains in the same house more than three or four years; it is, no doubt, partly on this account that their houses are built in a less solid style than those of most other tribes. The timbers used are lighter; the house is not raised so high above the ground, and the floor is usually made of split bamboo in place of the heavy planks used by Kayans and others. The plan of construction is less regular. The numerous slight supporting piles pass through the floor of the gallery in all sorts of odd positions; the only part that is kept clear of them being a narrow gangway that runs from end to end of the house; it adjoins the private chambers, and is about four feet in width; it is called TEMPUAN.

Some of the Klemantans make houses very inferior to those of the Kayans in respect to size, solidity, and regularity of construction; lashed bamboos largely replace the strongly morticed timber-work of the better houses; but the worst houses of all are made by those Punans who have recently adopted the agriculture and settled habits of the other peoples.

### Other Kinds of Wood-working

The building of houses and the shaping of boats are by far the most important kinds of wood-working; but there are many small articles of wood in the making of which much skill and ingenuity are displayed. Among these the shields and parang-sheaths deserve special mention. The former have been described in Chapter X.

The sword-sheath is made from two slips of hard wood, cut to fit together exactly, leaving a space accurately shaped for the lodgment of the sword-blade. The two slips are neatly lashed together with rattan, and in many cases are elaborately carved with varieties of a peculiar conventional design in relief (see vol. i., p. 240).

Dishes of iron-wood, now almost superseded by European earthenware, were formerly in general use (Figs. 6 and 7). Their shapes are very good; the dish is generally provided with one or two "ears" or flanges for the grip of the hands, and these are cunningly decorated with carved designs or inlaid pieces of shell or pottery. Some have a spout opposite the single handle. The hollowing and general shaping of such dishes is done with a small adze, and they are finished with the knife.

### Basket-work, etc.

The weaving of baskets, mats, and caps is one of the most important handicrafts of the Kayans. It is chiefly practised by the women, though the men help in collecting and preparing the materials. The material chiefly used is strips of rattan. A rattan about one-third of an inch in diameter is split into five strips, and the inner surface of each strip is smoothed with a knife; but the stems of several other jungle-plants are also used.

The most important of the baskets (Pl. 43), are the following: The large one used for carrying PADI from the farms to the house; the small basket hung on the back by a pair of shoulderstraps, and always carried by the men on going far from home; the fish-baskets; large baskets provided with lids and kept in the rooms for storing clothing and other personal valuables; the winnowing trays, and the large rough basket used for carrying on the back water-vessels or any other heavy objects (Fig. 41).

Of the mats (see Pl. 43), the principal are the mat worn round the waist for sitting upon; the large mats spread for seating several persons in the gallery or private chambers; those spread on the floor for catching the winnowed rice, or on the platforms outside the gallery for exposing and drying the PADI before pounding it; the mat which every person spreads to sleep upon.

Most of these baskets and mats are made from narrow strips of rattan varying from 1/16 to 1/4 of an inch according to the size and use of the article; the strips are closely woven with great regularity. The commonest arrangement is for two sets of strips to cross one another at right angles, each strip passing over and under two of the opposed set. The basket-work so made is very pliable, tough, and durable. The standard shapes are worked out with great precision. The Kayans are generally content to make strong serviceable basket-ware without ornamentation; but in a large proportion of basket-ware of this kind made by the other peoples, strips of rattan dyed black are combined with those of the natural pale yellow colour, and very effective patterns are thus worked in. The dyeing of the strips is effected by soaking them in a dye obtained by beating out in water the soft stem and leaves of a plant known as TARUM. The dark stain is rendered still blacker by subsequently burying the strips in the mud of the river for some ten days, or by washing them in lime. The dyed strips are then jet black with a fine polished surface, and the dye is quite permanent.

A form of mat-work deserving special notice is the LAMPIT, the mat used largely for sleeping and sitting upon. It is made of stout strips of rattan lying parallel to one another, and held together by strings threaded through the strips at right angles to their length at intervals of four or five inches. This mat has an extremely neat appearance and allows itself to be neatly rolled up. The piercing of the rattan strips at suitable intervals is facilitated by the use of a block of wood grooved for the reception of the strip and pierced with holes opening into the groove at the required intervals.

The most elaborately decorated and finely plaited basket-ware is made by some of the Klemantan sub-tribes, especially the Kanowits and the Tanjongs, and the Kalabits, who use, as well as the black dye, a red dye (Pl. 110). The last is made by boiling the seeds of the rattan in water and evaporating the product until it has the consistency of a thick paste. The Punans also excel in this craft. These adepts barter much of their handiwork in this kind with the people of communities less skilled in it. This affords yet another illustration of the fact that the various specialised handicrafts are traditional in certain tribes and sub-tribes, and are practised hardly at all or in an inferior manner only by the other tribes, who seem to find it impossible to achieve an equal degree of mastery of these crafts.

### Hat-making

The large flat circular hat worn by the Kayans for protection against sun and rain is made by the women from the large leaves of a palm. It is the only important handicraft practised by the women only. The hard tough fluted leaves are pressed flat and dried, when the flutes form ribs diverging from the stem. Triangular pieces of the length of the radius of the hat (I.E. from twelve to eighteen inches) are cut and then sewn together in a double layer; those of the upper layer radiate from the centre; those of the under layer are disposed in the reverse direction, so that their ribs diverge from the periphery, crossing those of the upper layer at an acute angle. This arrangement gives great rigidity to the whole structure. The two layers are stitched together by threads carried round the hat in concentric circles at intervals of about one inch. The peripheral edges are sewn to a slender strip of rattan bent to form a circle, the two ends overlapping. The centre is generally finished with a disc of metal or strong cloth on the outer surface (Pl. 45). The hats hung upon the tombs are decorated on the upper surface with bold designs painted in black and red.

Most of the other tribes make similar hats, and the Malanaus and Land Dayaks are especially skilled in this craft. The former make very large hats of similar shape, the upper surface being of strips of rattan dyed red and black, and woven to form elaborate patterns.

Besides these sun-hats, the Kayans and Kenyahs and some of the Klemantans weave with fine strips of rattan close-fitting skull-caps and head-bands. The ends of the strips, some three or four inches in length, are sometimes left projecting from the centre or forming a fringe round the lower edge.

The close-fitting hemispherical war-cap is made of rattans about half an inch thick split in halves.

### The Making of the Blow-pipe

The blow-pipe or SUMPITAN is perhaps the finest product of native Bornean craftsmanship. It is made by Kayans, Kenyahs, and Punans, and rarely by Ibans and Klemantans.

The best sumpitans are made from the hard straight-grained wood of the JAGANG tree. Having chosen and felled the tree, often one of large size, the craftsman splits from it long pieces about eight feet in length. Such a piece is shaved with the adze until it is roughly cylindrical and three to four inches in diameter (Pl. 112). The piece may be carried home to be worked at leisure, or the boring may be done upon the spot. A platform is erected about seven feet above the ground; and the prepared rod is fixed vertically with the upper end projecting through the platform, its lower end resting on the ground (Pl. 113). Its upper end is lashed to the platform, its lower end to a pair of stout poles lashed horizontally to trees, and its middle to another pair of poles similarly fixed.

The next operation, the boring of the wood, is accomplished by the aid of a straight rod of iron about nine feet long, of slightly smaller diameter than the bore desired for the pipe, and having one end chisel-shaped and sharpened. One man standing on the platform holds the iron rod vertically above the end of the wood, and brings its sharp chisel edge down upon the centre of the flat surface. Lifting the rod with both hands he repeats his blow again and again, slightly turning the rod at each blow. He is aided in keeping the rod truly vertical by two or three forked sticks fixed horizontally at different levels above the platform in such a way that the vertical rod slides up and down in the forks, which thus serve as guides. The rod soon bites its way into the wood. An assistant, squatting on the platform with a bark-bucket of water beside him, ladles water into the hole after every two or three strokes, and thus causes the chips to float out. This operation steadily pursued for about six hours completes the boring. In boring the lower part, the craftsman aims at producing a slight curvature of the tube by very slightly bending the pole and lashing it in the bent position; the pole on being released then straightens itself, and at the same time produces the desired slight curvature of the bore. This curvature is necessary in order to allow for the bending of the blow-pipe, when in use, by the weight of the spearblade which is lashed on bayonet-fashion. If the desired degree of curvature is not produced in this way, the wooden pipe, still in the rough state as regards its outer surface, is suspended horizontally on loops, and weights are hung upon the muzzle end until, on sighting through the bore, only a half circle of daylight is visible — this being the degree of curvature of the bore desired. The wood is then heated with torches, and on cooling retains the curvature thus impressed on it.

It only remains to whittle down the rough surface to a smooth cylinder slightly tapering towards the muzzle (Pl. 114), to polish the pipe inside and out, to lash on the spear-blade to the muzzle end with strips of rattan, and to attach a small wooden sight to the muzzle end opposite the spear-blade. The polishing of the bore is effected by working to and fro within it a long piece of closely fitting rattan; that of the outer surface, by rubbing it first with the skin of a stingray (which, although a marine fish, sometimes ascends to the upper reaches of the rivers),

and afterwards with the leaf (EMPLAS) which is the local substitute for emery paper.

The shaft of the poisoned dart is made from the wood of the NIBONG and wild sago palms. It is about nine inches in length and one–sixteenth to one–eighth of an inch in diameter (Pl. 115). On to one end of this is fitted a small tapering cylinder of tough pith, about one inch in length, its greatest diameter at its butt end being exactly equal to the bore of the pipe. The pith is shaved to the required diameter by the aid of a small wooden cylinder of the standard size (Fig. 42); this is prolonged in a pin of the same diameter as the shaft of the dart. A piece of pith transfixed by the pin is shaved with a sharp knife until its surface is flush with that of the wooden gauge.

The poison is prepared from the sap of the IPOH tree, ANTIARIS TOXICARIA. The milky sap runs out when the bark is incised, and is collected in a bamboo cup (Pl. 88). It is then heated slowly over a fire in a trough made from the leaf stem of a palm, until it becomes a thick paste of dark purple brown colour (Pl. 116). When the poison is to be applied to the darts, it is worked into a thinner paste on a palette with a spatula. A circular groove is cut round the shaft of the dart about two inches from its tip, and the part so marked off is rolled in the paste and then dried before a fire. For use against large game, pig, deer, or human beings, a larger dose of poison is required than can be carried on the tip of the shaft. A small triangular piece of metal is affixed by splitting the tip of the shaft, thrusting in the base of the triangular plate, and securing it with a fine thread of rattan or fern–stem. The poison is then applied to the surface of this metal. The metal is obtained nowadays from imported tin or brass ware, but formerly a slip of hard wood was used, and, possibly, in some cases stone.

The quiver for carrying the darts is a section of bamboo about four inches in diameter and ten inches in length, fitted with a cap of the same which fits over the shaved lip of the main piece (Fig. 44). A wooden hook lashed to the quiver enables it to be hung from the belt. The darts, mostly without piths, are wrapped in a squirrel skin and thrust tip downwards into the quiver. A small gourd tied to the quiver carries a supply of piths all ready to be placed on the darts.

#### Pottery

The importation of earthenware and of cooking pots of brass and iron has now almost put an end to the native manufacture of pottery; but in former times simple earthenware vessels for boiling rice were made by Kayans, Kenyahs, Ibans, and some of the Klemantans. Those who made no pots boiled their rice and sago in bamboos. The earthenware cooking pot is a simple egg–shaped vessel, one end of which is open and surrounded by a low everted lip or collar (Fig. 8, p. 60).

The clay is kneaded with water on a board until it has the desired consistency. The vessel is then built up on a hollowed base by squeezing the clay between a smooth rounded stone held by one hand within the vessel and a flat piece of wood, with which the clay is beaten from without. The roughly shaped vessel is allowed to dry in the sun and baked in the fire. In some cases the surface is smoothed and glazed by rubbing resin over its surface while hot.

Pots of this one shape only are made, but of several sizes. The commonest size holds about a quart; the largest about two gallons. A pot of this sort is carried in a basket made of fine unsplit rattans loosely woven in the form of interlacing rings.

#### The Manufacture of Bark–cloth

The native cloth, which was in universal use among the tribes of the interior until largely supplanted in recent years by imported cloth, is made from the bark of trees of several species (principally the KUMUT, the IPOH, and the wild fig). The material used is the fibrous layer beneath the outer bark. A large sheet of it is laid on a wooden block and beaten with a heavy wooden club in order to render it soft and pliable. A piece of the required size and shape is cut from the sheet, and sewn across the direction of the fibres with needle and thread at intervals of about an inch. This prevents the material splitting along the direction of the fibres. Before European needles were introduced, the stitching was done by piercing holes with a small awl and pushing the thread through the hole after withdrawing the awl (>Pl. 117).

#### Spinning and Weaving and Dyeing of Cloth

The Kayans, Kenyahs, and most of the Klemantans weave no cloth; but the Kayans claim, probably with truth, that they formerly wove a coarse cloth. In recent years the Ibans, Muruts, and a few of the Klemantan tribes have been the only weavers. It may be said, we think, without fear of contradiction, that this is the only craft in which the Ibans excel all the other peoples. Their methods are similar to those of the Malays, and have probably been

learnt from them. The weaving is done only by the women, though the men make the machinery employed by them.

The fibre used by the Ibans is cotton, which is obtained from shrubs planted and cultivated for the purpose. The seed is extracted from the mass of fibre by squeezing the mass between a pair of rollers arranged like a rude mangle, while the fibre is pulled away by hand (Pl. 118). Next the thread is spun from the mass of fibre by the aid of a simple wheel, turned by the right hand while the left hand twists the fibres (Pl. 119). The dyeing precedes the weaving if a pattern is to be produced. The web is stretched on a wooden frame about six feet long and twenty inches in width, by winding a long thread round it from end to end. The parts of the web corresponding to the parts of the cloth that are to remain undyed and of the natural pale brown colour of the thread are tied round with dried strips of a fibrous leaf (LEMBA), the upper and lower set of threads being wrapped up together in the same bundles (Pl. 120). If only one colour is to be applied, the web is then slipped off the frame. The threads are held in their relative positions by the wrappings, but are further secured by tying a string tightly about the whole bundle at each end. The web thus prepared is soaked in the dye for some two or three days, and then dried in a shady spot. The wrappings upon the threads are waterproof and protect the wrapped parts from the dye. When, after the dyeing, the web is stretched upon the loom, it presents the desired pattern in colour upon the undyed ground. The undyed weft is then woven across the web in the usual way. And since the threads of the weft do not appear on the surface, the dyed parts of the web present a uniformly coloured surface (Pl. 121).

In most cloths two colours, as well as the natural colour of the thread, appear on the surface — the commonest colour being a warm brick red (obtained from the bark of the SAMAK tree) and a dark purple (obtained from the leaves of the TARUM plant). Lime and gypsum are sometimes mixed with the watery extracts as mordants, but these are probably modern refinements. When two colours are to appear, those parts of the web which are to be of one colour (say purple) are wrapped up during the immersion in the red dye together with the parts that are to appear uncoloured. When this first dyeing is completed the web is prepared for the purple dye, by uncovering the undyed parts which are to be purple, and wrapping up in bundles the threads which have already been dyed red. After being soaked in the purple dye and dried, all the wrappings are removed from the web, and the desired pattern in three colours appears upon it when it is stretched. Perhaps the most noteworthy feature of the operation of dyeing is that the woman generally wraps up the threads in the way required to produce the pattern without any guidance, judging the length and number of the threads to be included in each bundle purely by memory of the design aimed at.

The only striking peculiarity of the loom is its extreme simplicity. The upper ends of the web are looped over a stout bar which is fixed to a pair of uprights about a yard above the floor. The lower ends of the web are looped over a stout rod, to the ends of which a loop of cord is tied. The woman sits on the ground, (see Pl. 121) with this loop around her waist, and thus stretches the web and maintains the necessary tension of it. The manipulation of the shuttle and of the threads of the web is accomplished without other mechanical aids than the rods to which the one set of webthreads is tied by short threads.

## CHAPTER 12. Decorative Art

All the tribes of Borneo practise a number of decorative arts. Some of the Klemantans, notably the Malanaus, excel all other tribes, in that they attain a high level of achievement in a great variety of such arts; but each tribe and sub-tribe preserves the tradition of some one or two decorative arts in which they are especially skilled. Thus some of the Klemantan tribes specially excel in the finer kinds of wood-carving (E.G. the decoration of paddles); the Kayans in tatuing and in chasing designs on steel; the Kenyahs in the painting of shields and in the production of large designs carved in low relief on wood and used for adorning houses and tombs; both Kayans and Kenyahs excel in the carving of sword-handles in deer's horn; the Barawans and Sebops in beadwork; the Kalabits and Ibans in tracing designs on the surface of bamboo; Punans in the decorative mat-work; Kanowits and Tanjongs in basket-work.

Wood-carving is the most generally practised and on the whole the most important of the decorative arts. Much of it is done on very hard wood; and the principal tools are the sword, the small knife carried in the sword-sheath, and adzes and axes of various sizes. The blade of the knife is some three inches in length, resembling in general shape the blade of the sword; it is wider in proportion, but has the same peculiar convexity of the one side and concavity of the other in transverse section. The shaft is sunk into the end of a rod of hard wood and secured with gutta and fine rattan lashing. The handle of hard wood is about a foot in length, half an inch in diameter, and slightly bowed in the plane of the blade, the convexity being in the direction of the cutting edge of the blade. The butt end of the handle is cunningly carved in the shape of a crocodile's head, or prolonged in a piece of carved deer's horn. The blade of the knife is held between the thumb and finger of the right hand, the cutting edge directed forwards, and the long handle is gripped between the forearm and the lower ribs; the weight of the body can thus be brought to the assistance of the arm in cutting hard material. With this knife most of the finer carving is done, the adze and sword being used chiefly for rough shaping.

The adze consists of a flat blade of steel in the shape of a highly acute-angled triangle (Pl. 111). The slightly convex base is the cutting edge. The upper half of the triangle (which may or may not be marked by a shoulder) is buried in the lashings by which it is attached to the wooden haft. The haft is a small bough of tough, springy wood, cut from a tree, together with a small block of the wood of the stem; the latter is shaved down until it forms an oblong block continuous with the haft and at an angle to it of 70[degree] — 80[degree]. The upper half of the metal blade is laid upon the distal surface of this block and lashed firmly to it with fine strips of rattan. A piece of skin is often placed between the metal and the lashings; this facilitates the removal of the blade, and enables the craftsman to alter the angle between the cutting edge and the haft. Commonly the blade is laid in the plane of the haft, and the implement is then what we should call a small axe; on turning the blade through 90°, it is converted to a small adze; and not infrequently the blade is turned through a smaller angle, so that its plane forms an acute angle with that of the haft.

Carved woodwork is commonly painted with black and red paint, prepared respectively from soot and iron oxide mixed with sugar-cane juice or with lime; the moist pigment is applied with the finger on larger surfaces, and the finer lines and edges are marked out with the aid of a chisel-edged stick of wood.

### Beadwork

Old beads are much valued and sought after by all the tribes except Ibans, especially by the Kayans. There are few families of the upper class that do not possess a certain number of them.

Many varieties are well known, and some of the Kayan women are very expert in recognising the genuine old specimens, and in distinguishing these varieties from one another and from modern imitations.

Formerly these old beads were one of the principal forms of currency, and they still constitute an important part of the wealth of many families.

Most of these valuable old beads are of foreign manufacture, though a few made from shell and agate are of the country. The old foreign-made beads were probably imported by Arab and Chinese traders at various dates. Some of them are probably of Chinese manufacture, others probably came from the near East and even from



Venice. Some are of glass curiously marked and coloured, others of stone inlaid with bits of different colours, others of some hard substance whose composition defies description. Certain rare kinds are especially valued and can hardly be bought at any price; they are reckoned to be worth at least 100 dollars apiece. The most valuable of all is known as the LUKUT SEKALA; the ownership of each such bead is as accurately known throughout a large district as the ownership of the masterpieces of ancient art in our own country. The wife of a rich chief may possess old beads to the value of thousands of pounds, and will wear a large part of them on any occasion of display (Pl. 130). These old beads are worn threaded together to form necklaces and girdles, being arranged with some reference to harmony of size and colour and to value, the most valuable being placed in the middle where they will be shown to best advantage. A single rare bead is sometimes worn on the wrist.

A woman who possesses a good stock of such beads will seldom be seen without some of them on her person. She will occasionally exchange a few for other varieties, and is generally eager to add to her collection; she may occasionally make a present of one or two to some highly esteemed friend or relative, and will generally assign them, but without handing them over, to various female relatives before her death.

Besides these valuable old beads there are in use among all the tribes many small glass beads of modern European manufacture. These are threaded to form a variety of designs, generally in two colours, the combination of black and yellow being the most commonly preferred. These strips of beadwork are put to many decorative uses: they are applied to the women's head-bands, to the centre of the sun-hat, to sword sheaths, to cigarette boxes, to the war-coat at the nape of the neck, and, by some Klemantans, to the jackets of the women.

The designs worked in this way are but few, and most of them are common to all the tribes. The thread used is prepared by rolling on the thigh fibres drawn from the leaf of the pine-apple; it is very strong and durable. The design to be reproduced is drawn or carved in low relief on a board. A thread is fixed across the end of the board and others are tied to it at short intervals; on these the beads are threaded, neighbouring threads being tied together at short intervals; and the colours of the beads are selected according to the demands of the pattern over which they are worked.

Besides these designs on the flat, tassels, girdles, necklaces, ear-rings, and cigarette rings are also made of these beads. The modern imported beads used for these purposes are sometimes improved by being ground flat on the two surfaces that adjoin their neighbours; this is done by fixing a number of them into the cut end of a piece of sugar-cane and rubbing this against a smooth stone. This treatment of the beads gives to the articles made of them a very neat and highly finished appearance.

#### Bamboo Decorations

The working of designs on the surface of pieces of bamboo is done very simply, but none the less effectively. Among the bamboo articles generally decorated in the way to be described are the native drinking-cup, the tobacco-box, and tubes for carrying flint and steel and all sorts of odds and ends.

The pattern to be produced is outlined with the point of the knife upon the surface of the bamboo, the artist working from memory of the desired pattern and adapting it to the proportions of the surface to be covered. The Iban works more freely than others, working out the pattern and modifying it to meet the exigencies of his material, section by section, as he goes along. Others plan out the design for the whole surface before working out any part in detail. It is probable that in no case does a man sit down and produce a new pattern; but the freer mode of working of the Iban leads him on to greater modifications of the traditional designs; and it is probably partly for this reason that a much larger variety of designs is applied in this way by them than by the other tribes, among whom they are very limited in number. But the greater variety of designs worked by the Ibans is due also to the readiness with which he copies and adopts as his own the patterns used by other tribes. The Kayans and Kenyahs use almost exclusively varieties of the dog pattern and of the hook and circle (see Fig. 47).

The design outlined by the point of the knife is made to stand out boldly from the ground by darkening the latter. This is achieved in two ways: (1) the ground is covered with parallel close-set scratches, not running continuously throughout the larger areas of the ground, but grouped in sets of parallel lines some few millimetres in length, the various sets meeting at angles of all degrees; (2) the hard surface of the bamboo is wholly scraped away from the ground areas to a depth of about half a millimetre. In either case the black or red paint is then smeared over the whole surface with the finger, and when it has become dried the surface is rubbed with a piece of cloth (Kayan), or scraped lightly with a knife (Iban). The pigment is thus removed from the intact parts and remains adherent to the lines and areas from which the hard surface layer has been removed. The design is thus

left in very low relief, and is of the natural colour of the bamboo upon a black or dark-red ground, or on a ground merely darkened by the parallel scratches (Pls. 126, 127).

#### Lashing

Lashing with strips of rattan and with coarse fibres from the leaf-stem of some of the palms and ferns is applied to a great variety of purposes, and largely takes the place of our nailing and screwing and riveting. It is carried out extremely neatly and commonly has a decorative effect. This effect is in some cases enhanced by combining blackened threads with those of the natural pale yellow colour; and the finer varieties of this work deserve to be classed with the decorative arts. The finest lashing-work is done by the Kalabits, who cover small bamboo boxes with a layer of close-set lashing, producing pleasing geometrical designs by the combination of yellow and black threads. The surface of the bamboo to which the lashing is applied is generally scraped away to a depth of about one-sixteenth of an inch; it is thus rendered less slippery than the natural surface, and is therefore gripped more firmly by the lashing, and the surface of the lashing is brought flush with the unlashd natural surface. The effect is not only a highly ornamental appearance, but also a greatly increased durability of the box, the natural tendency of the bamboo to split longitudinally being very effectively counteracted.

Similar fine decorative lashing is used by all the tribes for binding together the two halves of the sword sheath, and for binding the haft of knife or sword where it grips the metal blade, though brass wire is sometimes used for this purpose.

Closely allied to this lashing is the production of decorative knots. A considerable variety of knots are in common use; they are always well tied and practically effective, but some are elaborated for decorative purposes to form rosettes, especially by Kayans in making their sword sheaths.

#### Painting

We have stated above that the carved woodwork is often painted with black, red, and white pigments. It must be added that wooden surfaces are often painted on the flat, especially shields, the outer surfaces of walls of PADI huts, and tombs, also grave hats and the gunwales of boats, and decorative planks in the inner walls of the long gallery of the house. The Kenyahs and some of the Klemantans, especially the Skapans and Barawans, are most skilled in, and make most use of, this form of decoration; but it is probably practised in some degree by all the peoples.

The three pigments mentioned above — black, red, and white, made respectively from soot, iron oxide, and lime — are, so far as we know, the only native varieties; but at the present day these are sometimes supplemented with indigo and yellow pigments obtained from the bazaars. The pigment is generally laid on free-hand with the finger-tip, a few guiding points only being put in.

It may be mentioned here that individuals of all the tribes will occasionally amuse themselves by making rude drawings with charcoal on the plank wall of the gallery. The drawings usually depict human and animal figures, and scenes from the life of the people, and they generally illustrate the particular form of occupation in which the household is employed at the time, E.G. scenes from the PADI fields, a group of people weeding, the return of a war-party, the collection of honey, the capture of a large fish. These drawings are invariably very crude; their nature is sufficiently indicated by Pl. 128. There seem to be no noteworthy differences in this respect between the different peoples.

The Punans, having no houses and therefore no walls on which to draw pictures, have little opportunity to indulge any such tendency; but we have seen rude hunting scenes depicted by them on the walls of shallow caves; the technique consisted in scratching away the soft rotted surface of the limestone rock to produce outlines of the figures depicted.

The Malanaus, who live in the large limestone caves during the time of harvesting the edible nests of the swift, sometimes make rude drawings with charcoal on the walls of the cave.

The weaving of decorative designs on cloth is almost confined to the Sea Dayaks. Some account of the designs will be given below.

#### Shell-work

Shells (chiefly nassas and the flat bases of cone-shells) are sometimes applied by the Iban women to decorate their woven coats, by Kalabits (in concentric circles on their sunhats), and more rarely by other tribes in the decoration of baskets (Fig. 48). Fig. 49 represents a garment decorated in this fashion by Iban women, and worn by them when dancing with the heads of enemies in their hands.

### The Decorative Designs

The Kayans make use in their decorative art of a large number of conventional designs. The principal applications of these designs are in tatu, beadwork, the production of panels of wood for the adornment of houses, tombs, boats, and PADI barns, the decoration of bamboo boxes, and the painting of hats, and the carving of highly ornate doors to the rooms. All these applications involve the covering of flat or curved surfaces with patterns either in low relief only or without relief; and many of the designs are applied in all these different ways, and all of them together form a natural group. Besides these surface designs, a considerable variety of designs is used in giving decorative form to solid objects such as the handles of swords and paddles, the ends of main roof-beams in the houses, posts used in various rites and in the construction of tombs, the figure-heads of war-boats. These, with the exception of those used in carving the sword handles, which are highly peculiar, form another group of relatives. The designs chased upon the blades of the swords constitute a fourth natural group distinct from the other two groups. A fifth small group of designs is carved in the form of fretwork. We propose to say a few words about the designs of each of these five groups.

(1) The designs of the first group are the most numerous and most widely applied. A large proportion of them obviously are conventionalised derivatives from animal forms. Of these animal forms the human figure, the dog, and the prawn have been the originals of the largest number of patterns; the macaque monkey and the large lizard (VARANUS) are also traceable. Some designs vaguely suggest a derivation from some animal form, but cannot confidently be assigned to any one origin.

A few seemed to be derived from vegetable forms; while some few, for example the hookpattern, seem to be derived from no animal or vegetable form. The hook-pattern seems to be symbolical of conjunction and acquisition in various spheres.

Of all the designs the derivatives from or variants of the dog are the most numerous and the most frequently applied. The name dog-pattern (KALANG ASU) is given to a very large number; and of these some obviously reproduce the form of the dog, while the derivation of the others from the same original can generally be made clear by the inspection of a number of intermediate forms, although some of them retain but very slight indications of the form or features of the dog. The unmistakable dog-patterns are illustrated by one of the panels shown in Pl. 124; and in Pls. 134 ET SEQ. we reproduce a number of dog-patterns of more or less conventionalised characters. It will be noticed that the eye is the most constant feature about which the rest of the pattern is commonly centred; but that the eye also disappears from some of the most conventionalised. It seems probable that, although the name KALANG ASU continues to be commonly used to denote all this group of allies, many of those who use the term, and even of those who carve or work the patterns, are not explicitly aware in doing so that the name and the patterns refer to the dog, or are in any way connected with it; that is to say, both the words and the pattern have ceased to suggest to their minds the meaning of the word dog, and mean to them simply the pattern appropriate to certain uses.

We have questioned men who have been accustomed to apply the dog-pattern as to the significance of the parts of the pattern, and have led them to recognise that the parts of the dog, eye, teeth, jaws, and so on, are represented; and this recognition has commonly been accompanied by expressions of enlightenment, as of one making an interesting discovery.[67] This ignorance of the origin of the pattern is naturally true only of the more conventionalised examples, whether of the dog or other natural forms. Probably a few who have specially interested themselves in the designs have traced out their connections pretty fully, but this is certainly quite exceptional. Most of the craftsmen simply copy the current forms, introducing perhaps now and then an additional scroll, or some other slight modification.

Some men are well known as experts in the production of designs, and such a man can produce a wonderful variety, all or most being well-known conventions. Their mode of working frequently implies that the artist is working to a pattern, mentally fixed and clearly visualised, rather than working out any new design. For he will work first on one part of the surface, then on another, producing disconnected fragments of the pattern, and uniting them later. Although the women use these patterns in beadwork and in tatu, they rely in the main on the men for the patterns which they copy; these being drawn on wood or cloth for beadwork, or carved in low relief for tatu. A Kayan expert may carry in mind a great variety of designs. One such expert produced for our benefit, during a ten days' halt of an expedition, forty-one patterns, drawn with pencil on paper; most of these are of considerable complexity and elaboration.

(2) The designs carved in the solid or in high relief are for the most part conventionalised copies of human and animal forms; but the conventionalising is not carried so far as in those of the first class, so that the carving generally constitutes an unmistakable representation of the original. The posts set up as altars to the gods are generally carved in the human form, and the degree of elaboration varies widely from the rudest possible indication of the head and limbs to a complete representation of all the parts. But in no case (with the possible exception of some of the figures carved by Malanaus) is the human form reproduced with any high degree of accuracy or artistic merit (Figs. 50 — 53)

The animal forms are used chiefly as the figureheads of war-boats and at the ends of the main roof-beams of the houses; and some of these are executed with a degree of artistry that must win our admiration, especially when we reflect that the timber used is generally one of the harder kinds (but not iron-wood) such as the mirabo (AFZELIA PALEMBANICA), and that the only tools used are the axe, sword, and knife. The animals most frequently represented are the dog, crocodile, monkey, hornbill, and bear (Pls. 122, 125, Figs. 45, 46, 54 — 57). Carved dogs, comparatively little conventionalised, are sometimes used as the supports of low platforms upon which the chiefs may sit on ceremonious occasions.

(3) The handles of the swords, generally of deer's antlers, but sometimes of wood, exhibit a group of highly peculiar closely allied designs. All these seem to be derived from the human form, although in many cases this can only be traced in the light of forms intermediate between the less and the more highly conventionalised (Pls. 129, 184). In examples in which the human form is most obvious, it has the following position and character: — The butt end of the blade is sunk in a piece (about six inches in length) of the main shaft of the antler at its distal or upper end. This piece constitutes the grip of the handle or hilt. The proximal or lowest point of the antler projecting at an angle of some 70[degree] from the grip is cut down to a length of some four inches, forming a spur standing in the plane of the blade and towards its cutting edge. The grip is lashed with fine strips of rattan. The spur and the thick end in which the spur and the grip unite are elaborately carved. If the sword is held horizontally, its point directed forwards and its cutting edge upwards, the butt end is presented with the spur vertically before the face of the observer. It will then be seen that the surface turned to the observer presents the principal features of the human figure, standing with arms akimbo face to face with the observer. The key to the puzzle is the double row of teeth. Above this are the two eyes. Below the level of the mouth the elbows project laterally, and a little below these and nearer the middle line are the two hands; and below these again the two legs stand out, carved not merely in relief, but in the solid, and bent a little at the knee. The feet are indicated below and more laterally. From the crown of the head projects a ring of short hair made up of tufts white, black, and red in colour. Another short tuft projects from the region of the navel (? pubis), and a pair of tufts project laterally a little below the level of the mouth. The extremity of the main shaft of the antler projects a little beyond the feet of the human figure, and is carved in a form which is clearly an animal derivative — probably from the dog or possibly the crocodile. From its open jaws projects a long tuft of hair, and a pair of short tufts project laterally from the region of its ears. The whole of the carved part of the hilt thus represents a man standing upon the head of a dog (or crocodile). The interpretation of the whole is much obscured by the fact that the parts of the human figure named above are separated from one another by areas which are covered with a continuous scroll design in low relief, and by the fact that all the lateral parts of the carved area bear, scattered irregularly in relief, reduplications of the various features of the human figure, E.G. of the hands, elbows, knees, and even of the teeth, as well as many pairs of interlocking hooks. These last, which recur in other decorative designs, and which (as was said above) seem to symbolise the taking of heads, form an important and constant feature of the whole scheme of decoration. In the more elaborate examples they are carved out of the solid; and usually one hole (or more) about 5 mm. in diameter perforates the thickest part of the hilt, and contains in the middle plane a pair of these interlocking hooks.

In the most elaborate examples of these carved sword hilts all obvious trace of the human figure is lost in a profusion of detail, which, however, is of the same general character as that of the examples described above, and seems to consist of the various features of the human and animal pattern combined in wild profusion with regard only to decorative effect, and not at all to the reproduction of the parent forms.

With the decorative designs of the hilt of the sword must be classed those of its sheath. The sheath consists of two slips of TAPANG wood firmly lashed together with finely plaited rattan strips, both strips being hollowed so that they fit closely to the blade. It is provided with a plaited cord, which buckles about the waist. The inner piece

of the sheath is smooth inside and out. The outer surface of the outer piece is often elaborately decorated. The decoration consists in the main of designs carved in relief; and these are composed of the same elements as the design upon the sword hilt, namely, hooks, single and interlocking, elbows, teeth, etc., all woven about with a scroll design of relieved lines.

(4) The designs reproduced in fretwork are in the main adaptations of some of those used in decorating surfaces, especially of the dog pattern; but they are always conventionalised in a high degree (see Pl. 130). The hook pattern is frequently introduced to fill up odd corners. The human form is seldom or never traceable in work of this kind. Fretwork is chiefly used to adorn the tombs of chiefs.

(5) The designs chased on the surfaces of the blades of swords and knives and spear-heads form a distinctive group. They are flowing scroll patterns containing many spiral and S-shaped curves in which no animal or plant forms can be certainly traced, though suggestions of the KALANG ASU may be found. The lack of affinity between these patterns and those applied to other surfaces suggests that they may have been taken over from some other people together with the craft of the smith; but possibly the distinctive character is due only to the exigencies of the material. Some of the designs painted on hats and shields exhibit perhaps some affinity with these. This work is almost confined to the Kayans.

It is worthy of remark that the art work of the Kayans is in the main of a public character; for example, the decorative carving about the house is done by voluntary and co-operative effort in the public gallery and hardly at all in the private rooms; and ornamented hats and shields are hung in the gallery rather than in the private rooms; again, the war-boats, which are the common property of the household, are decorated more elaborately than those which are private property.

All these forms of art work are the products of distinctly amateur effort; that is to say that, although certain individuals attain special skill and reputation in particular forms of art, they do not make their living by the practice of them, but rather, like every one else, rely in the main upon the cultivation of PADI for the family support; they will exchange services of this kind, and definite payments are sometimes agreed upon, but a large amount of such work is done for one another without any material reward.

The Kenyahs, Klemantans, and Ibans

The Kenyahs make use of all, or most, of the patterns found among the Kayans, and there is little or nothing that distinguishes the decorative art of the one tribe from that of the other. They use the patterns based on the monkey rather more than the Kayans; and a decoration commonly found in their houses is a frieze running along the top of the main partition wall of the house, bearing in low relief an animal design, painted in red and black, which is called BALI SUNGEI (I.E. water-spirit) or Naga. The latter name is known to all the tribes, and is probably of foreign origin; and it seems possible that the design and this name are derived from the dragon forms so commonly used in Chinese decorative art.

The various Klemantan tribes make use of many decorative designs very similar to those of the Kayans. Different animal forms predominant among the different tribes, E.G. among the LONG POKUNS the form of the gibbon and of the sacred ape (SEMINOPITHECUS HOSEI) are chiefly used in house decoration. Among the Sebops and Barawans the human figure predominates; the Malanaus make especially elaborate crocodile images in solid wood. The tombs of some of the Klemantans are very massive and elaborately decorated. The Tanjongs and Kanowits and Kalabits, who excel in basket-work, introduce a variety of patterns in black, red, and white. The majority of these are simple geometrical designs which arise naturally out of the nature of the material; of more elaborate designs specially common are the hook-pattern (Fig. 58), the pigeon's eye (Fig. 59), and the caterpillar (Fig. 60).

In wealth of decorative designs the Ibans surpass all the other tribes. These designs are displayed most abundantly in the decoration of bamboo surfaces and in the dyeing of cloths. The designs on bamboo surfaces are largely foliate scrolls, especially the yam-leaf, but also occasionally animal derivatives.

The designs dyed upon the cloths (Fig. 61) are largely animal derivatives; but the artists themselves seldom are aware of the derivation, even when the pattern bears the name of its animal origin; and as to the names of all, except the most obvious animal derivatives, even experts will differ. The frog, the young bird, the human form, and the lizard are the originals most frequently claimed. Parts of the animal, such as the head or eye, are commonly repeated in serial fashion detached from the rest of its form. And in many cases it is, of course, impossible to identify the parts of the pattern, although it may show a general affinity with unmistakable animal

patterns. One such pattern very commonly used in dyeing is named after AGI BULAN, the large shrew (GYMNURA); but we have not been able to trace the slightest resemblance to the animal in any of the various examples we have seen (Pls. 131, 132).

We are inclined to suppose that the Ibans have copied many of their cloth-patterns from the Malays together with the crafts of dyeing and weaving. For their technique is similar to that of the Malays all over the peninsula, and the same is true of some of their designs. Only in this way, we think, can we account for their possession of these crafts, which are practised by but very few of the other inland peoples. The fact that plant derivatives predominate greatly over animals in their designs, whereas the reverse is true of almost all other tribes, bears out this supposition, for the Malays are forbidden by their religion to represent animal forms, and make use largely of plant forms.

#### Tatu

Tatuing is extensively practised among the tribes of Borneo. A great variety of patterns are used, and they are applied to many different parts of the body. A paper embodying most of the facts hitherto ascertained has been published by one of us (C. H.) in conjunction with Mr. R. Shelford, formerly curator of the Sarawak Museum, who has paid special attention to the subject; we therefore reproduce here the greater part of the substance of that paper,[68] with some slight modifications, and we desire to express our thanks to Mr. Shelford[69] for his kind permission to make use of the paper in this way.

The great diversity of tribes in Borneo involves, in a study of their tatu and tatuing methods, a good deal of research and much travel, if first-hand information on the subject is to be obtained. Between us we have covered a considerable area in Borneo and have closely crossquestioned members of nearly every tribe inhabiting Sarawak on their tatu, but we cannot claim to have exhausted the subject by any means; there are tribes in the interior of Dutch Borneo and in British North Borneo whom we have not visited, and concerning whom our knowledge is of the scantiest.

The practice of tatu is so widely spread throughout Borneo that it seems simpler to give a list of the tribes that do not tatu, than of those who do. We can divide such a list into two sections: the first including those tribes that originally did not tatu, though nowadays many individuals are met with whose bodies are decorated with designs copied from neighbouring tribes; the second including the tribes (mostly Klemantan) that have given up the practice of tatu owing to contact with Mohammedan and other influences.

#### A.

1. Punan. 2. Maloh. 3. Land Dyak.

#### B.

4. Malanau. 5. Miri. 6. Dali. 7. Narom. 8. Sigalang (down-river tribes of Ukit stock). 9. Siduan 10. Tutong. 11. Balait. 12. Bekiau (traces of a former practice of tatu occasionally found). 13. Bisaya. 14. Kadayans.

The patterns once employed by the tribes included in the second section of this list, most of which have adopted Malay dress and to some extent Malay customs, are lost beyond recall. The Land Dayaks display absolute ignorance of tatu, and aver that they never indulged in the practice. Maloh and Punan men ornamented with Kayan tatu designs we have often encountered; but they have no designs of their own, and attach no special significance to their borrowed designs.[70]

We may note here that the ornamentation of the body by means of raised scars and keloids is not known in Borneo. Both men and women of several tribes will test their bravery and indifference to pain by setting fire to a row of small pieces of tinder placed along the forearm, and the scars caused by these burns are often permanent, but should not be mistaken for decorative designs. Carl Bock (2, Pl. 16)[71] figures some Punan women with rows of keloids on the forearms, but states (p. 71) that these are due to a form of vaccination practised by these people.

The Kayans are, with one or two exceptions, the most tatued race in Borneo, and perhaps the best tatued from an artistic point of view; the designs used in the tatu of the men have been widely imitated, and much ceremonial is connected with the tatu of the women, an account of which we give below. Generally speaking, the true Klemantan designs are quite simple, and it is noteworthy that although the Kenyah tribes most nearly akin to Kayans have borrowed the Kayan tatu patterns, the majority of Kenyah and Klemantan tribes employ quite simple designs, whilst the primitive Kenyahs of the Batang Kayan river hardly tatu at all. A remarkable exception to the

general simplicity of the Klemantan patterns is furnished by the Ukits, Bakatan, and Biadjau, who tatu very extensively in the most complex designs; the Long Utan, an extinct tribe, probably of Klemantan stock, also used highly decorative and complex designs. Since so many tribes owe much of their knowledge of tatu and the majority of their designs to the Kayans, it will be well to commence with an account of the art of tatu as practised by these people.

Kayan Tatu.

Dr. Nieuwenhuis [9, p. 450] agrees with us in stating that amongst these people the men tatu chiefly for ornament, and that no special significance is attached to the majority of designs employed; nor is there any particular ceremonial or tabu connected with the process of tatuing the male sex. There is no fixed time of life at which a man can be tatued, but in most cases the practice is begun early in boyhood. Nieuwenhuis [9, p. 456] remarks that the chiefs of the Mendalam Kayans scarcely tatu at all.

Amongst the Sarawak Kayans, if a man has taken the head of an enemy he can have the backs of his hands and fingers covered with tatu (Pl. 141, Fig. 1), but, if he has only had a share in the slaughter, one finger only, and that generally the thumb, can be tatued. On the Mendalam river, the Kayan braves are tatued on the left thumb only, not on the carpals and backs of the fingers, and the thigh pattern is also reserved for head-taking heroes [9, p. 456]. Of the origin of tatu the Kayans relate the following story: — Long ago when the plumage of birds was dull and sober, the coucal (*CENTROPUS SINENSIS*) and the argus pheasant (*ARGUSIANUS GRAYI*) agreed to tatu each other; the coucal began on the pheasant first, and succeeded admirably, as the plumage of the pheasant bears witness at the present day; the pheasant then tried his hand on the coucal, but being a stupid bird he was soon in difficulties; fearing that he would fail miserably to complete the task, he told the coucal to sit in a bowl of SAMAK tan, and then poured the black dye over him, and flew off, remarking that the country was full of enemies and he could not stop; that is why the coucal to this day has a black head and neck with a tan-coloured body. Nieuwenhuis [9, p. 456] relates substantially the same story, the crow (*CORONE MACRORHYNDYUS*), however, being substituted for the coucal and the incident of the bowl of SAMAK tan omitted.

Among Kayans isolated designs are found on the following parts of the bodies of the men: — The outside of the wrist, the flexor surface of the forearm, high up on the outside of the thigh, on the breasts and on the points of the shoulders, and, as already stated, in the case of warriors on the backs of the hands and fingers. But not all the men are tatued on all these parts of the body. The design tatued on the wrist (Pl. 139, Figs. 8 — 10) is termed LUKUT, the name of an antique bead much valued by Kayans; the significance of this design is of some interest. When a man is ill, it is supposed that his soul has escaped from his body; and when he recovers it is supposed that his soul has returned to him; to prevent its departure on some future occasion the man will "tie it in" by fastening round his wrist a piece of string on which is threaded a LUKUT[72] or antique bead, some magic apparently being considered to reside in the bead. However, the string can get broken and the bead lost, wherefore it seems safer to tatu a representation of the bead on the part of the wrist which it would cover if actually worn. It is of interest also to note that the LUKUT, from having been a charm to prevent the second escape of the soul, has come to be regarded as a charm to ward off all disease; and the same applies to its tatued representation.

A design just below the biceps of a Punan tatued in the Kayan manner is shown on Pl. 142, Fig. 10, and we were informed by the Punan that this also was a LUKUT, an excellent example of the indifference paid to the significance of design by people with whom such design is not indigenous.

On the forearm and thigh the UDOH ASU or dog pattern is tatued, and four typical examples are shown on Pl. 136, Figs. 1, 2, 5, 6. Nieuwenhuis has figured a series of these designs [9, Pl. 82][73] showing a transition from a very elongate animal form to a rosette form; we have occasionally met with the former amongst Sarawak Kayans, but it is a common thigh design amongst the Mendalam Kayans; the forms numbered B and C are unusual in Sarawak. Of the four examples given in Pl. 136 — and it may be noted that these met with the high approval of expert tatu artists — Figs. 1, 2, and 5 may be considered as intermediate between Nieuwenhuis' very elongate example F and the truncated form E which is supposed to represent the head only of a dog. Fig. 2 is characteristic of the Uma Balubo Kayans, and is remarkable in that teeth are shown in both jaws; whilst, both in this example and in Fig. 5, the eye is represented as a disc, in Figs. 1 and 6 the eye is assuming a rosette-like appearance, which rosette, as Nieuwenhuis' series shows, is destined in some cases to increase in size until it swallows up the rest of the design. Fig. 6 may be compared with Nieuwenhuis, Fig. E, as it evidently represents little more than the head of a dog. Although a single figure of the dog is the most usual form of tatu, we have met with an example of

a double figure; it is shown in Fig. 7; it will be observed that one of the dogs is reversed and the tails of the two figures interlock. Fig. 8 represents a dog with pups, TUANG NGANAK; A is supposed to be the young one.

The dog design figures very prominently in Kayan art, and the fact that the dog is regarded by these people and also by the Kenyahs with a certain degree of veneration may account for its general representation. The design has been copied by a whole host of tribes, with degradation and change of name (Fig. 62).

On the deltoid region of the shoulders and on the breast, a rosette or a star design is found (text, Figs. 63 and 64). As already stated, it seems in the highest degree probable that the rosette is derived from the eye in the dog pattern, and it is consequently of some interest to find that the name now given to the rosette pattern is that of the fruit of a plant which was introduced into Borneo certainly within the last fifty or sixty years. The plant is *PLUKENETIA CORNICULATA*, one of the Euphorbiaceae, and it is cultivated as a vegetable; its Kayan name is JALAUT. We have here a good example of the gradual degradation of a design leading to a loss of its original significance and even of its name, another name, which originated probably from some fancied resemblance between pattern and object, being applied at a subsequent date. IPA OLIM, I.E., open fruit of a species of *MANGIFERA*, is another name occasionally applied to the rosette pattern, but JALAUT is in more general use (cf. Pl. 140, Fig. 4, Pl. 141, Fig. 7, and Pl. 142, Fig. 9).

On Pl. 141, Fig. 1, is shown a hand tatued in the Kayan manner; the figures on the phalanges are known as TEGULUN,[74] representations of human figures or as SILONG, faces, and they are evidently anthropomorphic derivatives. The triangles on the carpal knuckles are termed SONG IRANG, shoots of bamboo, and the zigzag lines are IKOR, lines.

Kayan women are tatued in complicated serial[75] designs over the whole forearm, the backs of the hands, over the whole of the thighs and to below the knees, and on the metatarsal surfaces of the feet. The tatuing of a Kayan girl is a serious operation, not only because of the considerable amount of pain caused, but also on account of the elaborate ceremonial attached to this form of body ornamentation. The process is a long one, lasting sometimes as much as four years, since only a small piece can be done at a sitting, and several long intervals elapse between the various stages of the work. A girl when about ten years old will probably have had her fingers and the upper part of her feet tatued, and about a year later her forearms should have been completed; the thighs are partially tatued during the next year, and in the third or fourth year from the commencement, I.E. about puberty, the whole operation should have been accomplished.

A woman endeavours to have her tatu finished before she becomes pregnant, as it is considered immodest to be tatued after she has become a mother. If a woman has a severe illness after any portion of her body has been tatued, the work is not continued for some little time; moreover, according to Nieuwenhuis (9, p. 453), a woman cannot be tatued during seed time nor if a dead person is lying unburied in the house, since it is LALI to let blood at such times; bad dreams, such as a dream of floods, foretelling much blood-letting, will also interrupt the work. A tatued woman may not eat the flesh of the monitor lizard (*VARANUS*) or of the scaly manis (*MANIS JAVANICA*), and her husband also is included in the tabu until the pair have a male and a female child. If they have a daughter only they may not eat the flesh of the monitor until their child has been tatued; if they have a son only they cannot eat the monitor until they become grandparents. Should a girl have brothers, but no sisters, some of her tatu lines must not be joined together, but if she has brothers and sisters, or sisters only, all the lines can be joined.

Tatu amongst Kayan women is universal; they believe that the designs act as torches in the next world, and that without these to light them they would remain for ever in total darkness; one woman told Dr. Nieuwenhuis that after death she would be recognised by the impregnation of her bones with the tatu pigment. The operation of tatuing amongst Kayans is performed by women, never by men, and it is always the women who are the experts on the significance and quality of tatu designs, though the men actually carve the designs on the tatu blocks. Nieuwenhuis states (9, p. 452) that the office of tater is to a certain extent hereditary, and that the artists, like smiths and carvers, are under the protection of a tutelary spirit, who must be propitiated with sacrifices before each operation. As long as the children of the artist are of tender age she is debarred from the practice of her profession. The greater the number of sacrifices offered, or in other words, the greater the experience of the artist, the higher is the fee demanded. She is also debarred from eating certain food. It is supposed that if an artist disregards the prohibitions imposed upon her profession, the designs that she tatus will not appear clearly, and she herself may sicken and die.



The tools used by a tatu artist are simple,[76] consisting of two or three prickers, ULANG or ULANG BRANG, and an iron striker, TUKUN or PEPAK, which are kept in a wooden case, BUNGAN. The pricker is a wooden rod with a short pointed head projecting at right angles at one end; to the point of the head is attached a lump of resin in which are embedded three or four short steel needles, their points alone projecting from the resinous mass (Fig. 68). The striker is merely a short iron rod, half of which is covered with a string lashing. The pigment is a mixture of soot, water, and sugar-cane juice, and it is kept in a double shallow cup of wood, UIT ULANG; it is supposed that the best soot is obtained from the bottom of a metal cooking-pot, but that derived from burning resin or dammar is also used. The tatu designs are carved in high relief on blocks of wood, KELINGE[77] (Fig. 62), which are smeared with the ink and then pressed on the part to be tatued, leaving an impression of the designs. As will be seen later, the designs tatued on women are in longitudinal rows or transverse bands, and the divisions between the rows or bands are marked by one or more zigzag lines termed IKOR.

The subject who is to be tatued lies on the floor, the artist and an assistant squatting on either side of her; the artist first dips a piece of fibre from the sugar-palm (ARENKA SACCHARIFERA) into the pigment and, pressing this on to the limb to be tatued, plots out the arrangement of the rows or bands of the design; along these straight lines the artist tatus the IKOR, then taking a tatu block carved with the required design, she smears it with pigment and presses it on to the limb between two lines. The tater or her assistant stretches with her feet the skin of the part to be tatued, and, dipping a pricker into the pigment, taps its handle with the striker, driving the needle points into the skin at each tap. The operation is painful, and the subject can rarely restrain her cries of anguish; but the artist is quite unmoved by such demonstrations of woe, and proceeds methodically with her task. As no antiseptic precautions are taken, a newly tatued part often ulcerates, much to the detriment of the tatu; but taking all things into consideration, it is wonderful how seldom one meets with a tatu pattern spoilt by scar tissues.

It is against custom to draw the blood of a friend (PESU DAHA), and therefore, when first blood is drawn in tatuing, it is customary to give a small present to the artist. The present takes the form of four antique beads, or of some other object worth about one dollar; it is termed LASAT MATA, for it is supposed that if it were omitted the artist would go blind, and some misfortune would happen to the parents and relations of the girl undergoing the operation of tatu.

When the half of one IKOR has been completed the tatter stops and asks for SELIVIT; this is a present of a few beads, well-to-do people paying eight yellow beads of the variety known as LAVANG, valued at one dollar apiece, whilst poor people give two beads. It is supposed that if SELIVIT was not paid the artist would be worried by the dogs and fowls that always roam about a Kayan house, so that the work would not be satisfactorily done; however, to make assurance doubly sure, a curtain is hung round the operator and her subject to keep off unwelcome intruders. After SELIVIT has been paid a cigarette is smoked, and then work recommences in earnest, there being no further interruptions for the rest of the day except for the purpose of taking food. The food of the artist must be cooked and brought to her, as she must not stop to do other work than tatuing, and her tools are only laid aside for a few minutes while she consumes a hurried meal. Fowls or a pig are killed for the artist by the parents of the girl who is being tatued. The fees paid to the artist are more or less fixed; for the forearms a gong, worth from eight to twenty dollars, according to the workmanship required; for the thighs a large TAWAK, worth as much as sixty dollars if the very best workmanship is demanded, from six to twenty dollars if only inferior workmanship is required.[78] For tatuing the fingers the operator receives a MALAT or short sword. Nieuwenhuis (8, p. 236) states that it is supposed that the artist will die within a year if her charges are excessive; but we have not met with this belief amongst the Kayans of the Rejang and Baram rivers.

The knee-cap is the last part to be tatued, and before this is touched the artist must be paid; as this part of the design is the keystone, as it were, of the whole, the required fee is always forthcoming. A narrow strip down the back of the thigh is always left untatued; it is supposed that mortification of the legs would ensue if this strip was not left open.

The time at which to begin tatuing a girl is about the ninth day after new moon, this lunar phase being known as BUTIT HALAP, the belly of the HALAP fish (BARBUS BRAMOIDES); as the skin of the girl being tatued quickly becomes very tender, it is often necessary to stop work for a few days, but it is a matter of indifference at what lunar phase work recommences, so long as it was originally begun at BUTIT HALAP.

A Kayan chief of the Mendalam river informed Dr. Nieuwenhuis [9, p. 4551 that in his youth only the wives

and daughters of chiefs were permitted the thigh tatu, women of lower rank had to be content with tatu of the lower part of the shin and of the ankles and feet. The designs were in the form of quadrangular blotches divided by narrow untattooed lines, and were known as TEDAK DANAU, lake tatu. The quadrangles were twelve in number, divided from each other by four longitudinal and two transverse untattooed lines, 6 millimetres broad, two of the longitudinal lines running down each side of the front of the leg, and two down each side of the calf, approximately equidistant; the forearm was tattooed in the same style. This manner of tatu is obsolete now, but Dr. Nieuwenhuis was fortunate in finding one very old woman so tattooed.

Nowadays the class restrictions as regards tatu are not so closely observed, but it is always possible to distinguish between the designs of a chief's daughter, an ordinary free-woman, and a slave, by the number of lines composing the figures of the designs, — the fewer these lines, the lower being the rank of the woman. Moreover, the designs of the lower-class women are not nearly so complex as those of the higher class, and they are generally tattooed free-hand.

A very typical design for the forearm of a woman of high rank is shown on Pl. 140, Fig. 3; it is taken from a Kayan of the Uma Pliau sub-tribe dwelling on the Baram river, and may be compared with the somewhat similar designs of the Mendalam river Kayans figured by Nieuwenhuis [9, Pl. 85], one of which is a design for a chief's daughter, the other for a slave. The zigzag lines bounding the pattern on both surfaces of the forearm are the IKOR, and these, as already stated, are marked out with a piece of fibre dipped in the tatu ink before the rest of the pattern is impressed by a wood-block or KLINGE. Taking the flexor surface of the forearm first, the units of the designs are: three bands of concentric circles (AAA) termed BELILING BULAN or full moons; a triangle (B) each, limb formed by several parallel lines, DULANG HAROK, the bows of a boat; spirals (CC) ULU TINGGANG, the head of the hornbill. On the supinator surface BELILING BULAN and ULU TINGGANG occur again, but instead of DULANG HAROK, there are two other elements, a bold transverse zigzag known as DAUN WI (D), rattan leaves, and at the proximal end of the pattern an interlacing design, TUSHUN TUVA (E), bundles of tuba root (DERRIS ELLIPTICA). The fingers are very simply tattooed with a zigzag on the carpal knuckles and transverse lines across the joints; the thumb is decorated in a slightly different way. In Dr. Nieuwenhuis' designs cited above, we find much the same elements; in one of them the BELILING BULAN are more numerous and more closely set together, so that the concentric circles of one set have run into those of the next adjoining; the TUSHUN TUVA pattern is termed POESOENG, evidently the same as TUSHUN; the spirals are much degraded in one example and are called KROWIT, or hooks, whilst in the more elaborate example they are known as MANOK WAK, or eyes of the SCOPS owl; the PEDJAKO PATTERN is an addition, but the meaning of the word is not known; the pattern on the fingers is much more complex than in the Uma Pliau example, and is perhaps a degraded hornbill design.

Nieuwenhuis [8, Pl. XXIV.] figures the hand of a low-class woman tattooed with triangular and quadrangular blotches, and with some rude designs that appear to have been worked in free-hand.

On Pl. 140, Fig. 1, is shown the design on the forearm of a high-class woman of the Uma Lekan Kayans of the Batang Kayan river, Dutch Borneo; in our opinion these elegant designs are quite in the front rank of the tatu designs of the world. In spite of the elaboration, it is quite possible to distinguish in these the same elements as in the Uma Pliau specimen, viz.: BELILING BULAN ULU TINGGANG DAUN WI and TUSHUN TUVA; but the DULANG HAROK is absent, and the SILONG or face pattern appears.

Nieuwenhuis [9, Pl. 93, b] figures the arm-tatu (supinator surface only) of a Kayan woman of the Blu-u river, a tributary of the Upper Mahakkam; the main design is evidently a hornbill derivative, the knuckles are tattooed with quadrangular and rectangular blotches. The hornbill plays an important part in the decorative art of the Long Glat, a Klemantan tribe of the Mahakkam river, and we suspect that, if these Blu-u Kayans are of true Kayan stock, they have borrowed the hornbill design from their neighbours.

With regard to the thigh patterns, it is usual to find the back of the thigh occupied with two strips of an intersecting line design, or some modification thereof; the simplest form is shown on Pl. 138, Fig. 1; it is known as IDA TELO, the three-line pattern, and is used by slaves; a more elaborate example from the Rejang river is shown in Fig. 3, and is used both by slaves and free-women. Pl. 138, Fig. 2, and Pl. 139, Fig. 6, are termed IDA PAT, the four-line pattern, and are for free-women, not for slaves. The latter figure is a combination of IDA PAT and IDA TELO. The wives and daughters of chiefs would employ similar designs with the addition of another line, when they are termed IDA LIMA, the five-line pattern, or else a design, known as IDA TUANG, the

underside pattern, two examples of which are given on Pl. 139, Figs. 1 and 2. If these two latter designs are compared with the hornbill design of the Long Glat, a figure of which, taken from Nieuwenhuis [9, Pl. 86] is given (Pl. 139, Fig. 3) a certain similarity in the MOTIF of the designs can be recognised. It must be remembered that the Long Glat design is tatued in rows down the front and sides of the thigh, whilst these Kayan designs have been modified to form more or less of a sinuous line design for the back of the thigh; or, in other words, the hornbill elements in the Long Glat design, though they are serially repeated, are quite separate and distinct one from the other, whilst in the Kayan designs the hornbill elements are fused and modified to produce the sinuous line pattern that in one form or another is generally employed for the decoration of the back of the thigh. In this connection Pl. 139, Fig. 5, is instructive; it is taken from a tatu block which, together with those from which Figs. 1 and 2 are taken, was collected many years ago by Mr. Brooke Low, amongst the Kayans of the Upper Rejang; it also appears to be a doc, derivative, and no doubt was used for the tatu of the front of a woman's thigh,[79] being serially repeated in three or four rows as with the Long Glat. Yet it was unknown as a tatu design to some Kayans of the Baram river to whom it was shown recently; they informed us that the name of the design was TUANG BUVONG ASU, pattern of dog without tail, and they stated that a somewhat similar design was engraved by them on sword blades. Pl. 139, Fig. 4, is taken from a tatu-block of uncertain origin, and the same name was also applied to this by the Baram Kayans, though with some hesitation and uncertainty; the hornbill MOTIF is here quite obvious.

We have stated that an interlacing line design is generally employed for the back of the thigh; we figure, however, a remarkable exception from the Baloi river (Pl. 140, Fig. 5); this is known as KALONG KOWIT, hook pattern; A is a representation of an antique bead, BALALAT LUKUT, B is known as KOWIT, hooks. Between the two strips of line design at the back of the thigh runs a narrow line of untatued skin, the supposed object of which has been described above. The front and sides of the thigh in highclass women will be covered with three or more strips of pattern such as are shown on Pl. 138, Figs. 4 and 5; in the latter TUSHUN TUVA, DULANG HAROK, ULU TINGGANG and BELILING BULAN can again be recognised; the ULU TINGGANG in this example are less conventionalised than in the spirals of the forearm pattern, and a spiral form of TUSHUN TUVA IS shown in addition to the angular form. The other example exhibits IDA LIMA, TUSHUN TUVA JALAUT, KOWIT (the interlocking spirals) and ULU TINGGANG. All these strips of pattern are separated by the IKOR. The knee-cap is the last part of the leg to be tatued, and the design covering it is called the KALONG NANG, the important pattern, good examples of which are shown in Figs. 70, 71; Fig. 72 represents the design on the front and sides of the thigh of an Uma Semuka Kayan of the slave class, which also is termed TUSHUN TUVA.

The admirable Uma Lekan patterns (Pl. 140, Fig. 2) represent on the back of the thigh (AA) BELILING BULAN, on the front and sides (BB) SILONG, faces or SILONG LEJAU, tigers' faces; the latter is evidently an anthropomorph; the knee-cap design is particularly worthy of notice.[80] Nieuwenhuis [9, Pl. 83, and 8, Pl. XXVII.] figures the thigh tatu of a Mendalam woman of the PANJIN or free-woman class; the back of the thigh is occupied by two strips of the four line pattern, here termed KETONG PAT, and a somewhat crude anthropomorphic design, known as KOHONG KELUNAN, human head, covers the front and sides of the thigh (text Fig. 69); the centre of the knee-cap is occupied by a very similar anthropomorph, known however as NANG KLINGE, the important design, and extending in a semicircle round the upper part of it is a design made up of intersecting zigzags and known as KALANG NGIPA, the snake design; below the knee-cap is a transverse band of hour-glass shaped figures termed PEDJAKO. Nieuwenhuis also figures [9, Pl. 84] the thigh pattern of a chiefs daughter from the same river; this only differs from the preceding example in the greater elaboration of the KOHONG KELUNAN; the back of the thigh is covered by a form of the IDA PAT pattern not by the IDA LIMA pattern. Some of the tatu-blocks employed by the Mendalam Kayan women are figured in the same works [9, Pl. 82, and 8, Pl. XXVIII.]

A comparison of the figures here given lends strong support to the supposition that the tuba-root pattern is merely a degraded anthropomorph. Fig. 69 is a recognisable anthropomorph such as is tatued in rows on the thigh, and some such name as TEGULUN, SILONG, or KOHONG is applied to it. Fig. 70 is a knee-cap design, evidently anthropomorphic in nature, but termed NANG KLINGE, the important design, since it is the last part of all to be tatued. Fig.71 is termed TUSHUN TUVA, but a distinct face is visible in the centre of the pattern; the general similarity between this last design and the examples of TUSHUN TUVA shown in the designs on Pl. 138, Figs. 4 and 5, is quite obvious; the lower of the two TUSHUN TUVA designs in Fig. 5, Pl. 138, is Composed of

angular lines, thus reverting to the angularity of the lines in text, Fig. 69; at E, Fig. 3, Pl. 140, the lines are partly angular, partly curved, and the bilateral symmetry is entirely lost; finally, in Fig. 72, the relationship of the TUSHUN TUVVA design to an anthropomorph is entirely lost.

A typical form of tatu on the foot of a low-class woman is shown on Pl. 138, Fig. 6; a chiefs daughter would have some modification of the principal element of the thigh design tattooed on this part.

#### Kenyah Tatu.

The culture of the Sarawak Kenyahs is closely allied to that of the Kayans, and their tatu may be considered separately from that of the Kenyah-Klemantan tribes whose tatu is much more original in design.

The men of such Kenyah tribes as the Lepu Jalan, Lepu Tau, Lepu Apong, etc., if tattooed at all, are tattooed in the Kayan manner, that is, with some form of dog design on the forearms and thighs, and with rosettes or stars on the shoulders and breasts. The dog design is usually known as USANG ORANG, the prawn pattern; the teeth of the dog are held to represent the notched border of the prominent rostrum characteristic of the prawns of the genus PALAEMAN, that occur so plentifully in the fresh-water streams of Borneo. An extreme modification of the dog design to form a prawn is shown in Pl. 137, Fig. 9; Pl. 136, Fig. 4, is a dog design, and is so termed. Pl. 136, Fig. 10, is known as TOYU, a crab; A is the mouth, BA; B the claw, KATIP; C the back, LIKUT; D the tail, IKONG. Pl. 136, Fig. 9, is termed LIPAN KATIP, jaws of the centipede. All these are tattooed on the flexor surface of the forearm or on the outside of the thigh.[81] An example of a star design termed USONG DIAN, durian pattern, is shown in Pl. 141, Fig. 7. The women of these tribes tattoo in the same way, and employ the same designs as the Kayans, except that they never tattoo on the thighs. Amongst the Baram Kenyahs there appears to be very little ceremonial connected with the process of tattooing.

#### Kenyah-Klemantan[82] Tatu.

Amongst this rather heterogeneous assemblage of tribes considerable diversity of tatu design is found. The men are seldom tattooed, but when they are it is in the Kayan manner. The Peng or Pnihing of the Koti basin have an elaborate system of male tatu, but it seems to be dying out; the only examples that we have met are shown on Pl. 141, Figs. 2 and 3. These represent the arms of Peng men; unfortunately we have no information as to the significance of the designs. The only other Peng design that we are acquainted with is a large disc tattooed on the calf of the leg. Dr. Nieuwenhuis states that Peng women are tattooed with isolated dog designs on the arms and legs like the men of Kayan tribes [9, p. 461].

The Kenyah women of the Baram district exhibit a very primitive style of tatu on the arms and hands (Pl. 141, Fig. 4); a broad band encircles the middle of the forearm, and a narrow band an inch or so distant of this also surrounds the arm; from this narrow band there run over the metacarpals to the base of the fingers eight narrow lines, the outermost on the radial side bifurcating; the design is known as BETIK ALLE or line tatu. No other part of the body is tattooed.

Nieuwenhuis figures [9, Pl. 95] a somewhat similar design employed by the Lepu Tau women of the Batang Kayan; but in this case, instead of eight longitudinal lines stopping short at the knuckles, there are five broad bands running to the finger nails, interrupted at the knuckles by a 2 cm.-broad strip of untattooed skin. Moreover, with these people the front and sides of the thigh and the shin are tattooed with primitive-looking designs made up of series of short transverse lines, curved lines, and broad bands; the names of the designs are not given; these designs are said to be characteristic of the slave-class, the higher-class women copying the more elaborate designs of the Uma Lekan.

Amongst the Batang Kayan Kenyahs tattooing cannot be executed in the communal house, but only in a hut built for the purpose. The males of the family, to which the girl undergoing the operation belongs, must dress in bark-cloth, and are confined to the house until the tatu is completed; should any of the male members be travelling in other parts of the island tatu cannot be commenced until they return. Amongst the Uma Tow (or Lepu Tau) the daughter of a chief must be tattooed before any of the other females of the house; should the chiefs daughter (or daughters) die before she has been tattooed, all the other women of the house are debarred from this embellishment (Nieuwenhuis [9, pp. 453, 454]).

Nieuwenhuis, in his great work on Borneo, which we have cited so often, gives a good account of the tatu of the Long Glat. According to this authority, girls when only eight years old have the backs of the fingers tattooed, at the commencement of menstruation the tatu of the fingers is completed, and in the course of the following year the tatu is carried over the backs of the hand to the wrist; the feet are tattooed synchronously with the hands. At the

age of eighteen to twenty the front of the thigh is tatued, and later on in life the back of the thigh; unlike the Kayans it is not necessary that the tatu of the thighs should be finished before child-bearing. A Long Glat woman on each day that she is tatued must kill a black fowl as food for the artist. They believe that after death the completely tatued women will be allowed to bathe in the mythical river Telang Julan, and that consequently they will be able to pick up the pearls that are found in its bed; incompletely tatued women can only stand on the river bank, whilst the untatued will not be allowed to approach its shores at all. This belief appears to be universal amongst the Kenyah-Klemantan of the Upper Mahakam and Batang Kayan. On Pl. 86 of Nieuwenhuis' book [9] is figured the thigh tatu of a Long Glat woman; the front of the thigh is occupied with two rows of the hornbill MOTIF to which reference has already been made. The sides of the thigh are tatued with a beautiful design of circles and scrolls termed KERIP KWE, flight feathers of the Argus pheasant, and on the back of the thigh is a scroll design borrowed from the decoration of a grave and known as KALANG SONG SEPIT.[83] The knee is left untatued. Some other examples of the KERIP KWE design are given on Pl. 90, and of the SONG SEPIT on Pl. 91; some of the SONG SEPIT designs recall the KALANG KOWIT designs of the Baloi Kayans. Instead of a hornbill MOTIF, a dog's head MOTIF is sometimes tatued on the thigh, an example of which is figured on Pl. 87, Fig. A; it appears to be a composition of four heads, and in appearance is not unlike SILONG LEJAU of the Uma Lekan, figured by us. In the Long Glat thigh-tatu the bands of pattern are not separated by lines of IKOR, as with the Kayans. Round the ankles the Long Glat tatu sixteen lines, 3 mm. broad, known as TEDAK AKING; the foot is tatued much after the manner shown in our Fig. 6, Pl. 143. The supinator surface of the forearm and the backs of the hands are also tatued, but the design does not extend so far up the arm as with the Kayans [9, Pl. 92]; the forearm design is made up of a hornbill MOTIF, but that shown in Fig. A of the plate is termed BETIK KULE, leopard pattern, and is supposed to be a representation of the spots on the leopard's skin; it is stated to be taken from a Long Tepai tatu-block; the knuckles are tatued with a double row of wedges, the finger joints with quadrangles.

The Uma Luhut seem to have borrowed their tatu and designs very largely if not entirely from the Long Glat; with them the back of the thigh is tatued before the front, which is exceptional. Half of the knee is tatued. Their designs are modifications of the hornbill and dog's head designs of the Long Glat. Nieuwenhuis figures several examples [9, Pl. 87, Fig. B, Plate 88, Pl. 89, Pl. 93, Fig. A, Pl. 94], which should be consulted, as they are of the greatest interest.

The Long Wai seem to tatu in much the same way as the Uma Luhut [2, Pl., p. 189 and 7, p. 91].

Tatu of Muruts and Klemantans.

A number of tribes have adopted more or less the tatu of the Kayans. Thus the men of the following Sarawak tribes, Sibops, Lirongs, Tanjongs, Long Kiputs, Barawans, and Kanowits, are often, though not universally, tatued like Kayans. The shoulder pattern of the Barawans is distinctive, in that the rosette nearly always bears a scroll attached to it, a relic of the dog MOTIF, from which the design is derived (Pl. 138, Fig. 6). E. B. Haddon [4, Fig. 17] figures another form of the dog MOTIF, which is tatued on the thigh or forearm, and Ling Roth [7, p. 86] figures three rosette designs for the breast; we figure two modifications of the dog design on Pl. 137, Figs. 7 and 8. The women of these tribes very rarely tatu; we have seen a Tanjong woman with a circle of star-shaped figures round her wrist and one on the thumb. The Tring women of Dutch Borneo are tatued on the hands and thighs like Kayans; Carl Bock [2, Pl., p. 187] gives some figures of them. In our opinion all of these tribes owe their tatu entirely to foreign influences; for we have failed to find a single example of an original design; the practice is by no means universal, and great catholicity of taste is shown by those who do tatu. The men, moreover, do not tatu as a sign of bravery in battle or adventure, but merely from a desire to copy the more warlike Kayan.

We shall now treat of those tribes that have a distinctive and original tatu, but it is well to bear in mind, that amongst many of these people also the Kayan designs are coming into vogue more and more, ousting the old designs. No tatu-blocks are employed for the indigenous patterns, all the work being done free-hand.

(A) UMA LONG. — The Uma Long women of the Batang Kayan exhibit the most primitive form of tatu known in Borneo. It differs from every other form in that the tatued surface of the skin is not covered uniformly with the ink, but the design, such as it is, is merely stippled into the skin, producing an appearance of close-set irregular dots. Two aspects of the forearm of an Uma Long woman are shown on Pl. 142, Fig. 5. No other part of the body is tatued, and the practice is confined to the female sex.

(B) DUSUN. — The men only tatu. The design is simple, consisting of a band, two inches broad, curving

from each shoulder and meeting its fellow on the abdomen, thence each band diverges to the hip and there ends; from the shoulder each band runs down the upper arm on its exterior aspect; the flexor surface of the forearm is decorated with short transverse stripes, and, according to one authority, each stripe marks an enemy slain [7, p. 90]. This form of tatu is found chiefly amongst the Idaan group of Dusuns; according to Whitehead [11, p. 106] the Dusuns living on the slopes of Mount Kina Balu tatu no more than the parallel transverse stripes on the forearm, but in this case no reference is made to the significance of the stripes as a head-tally. The Dusun women apparently do not tatu.

(C) MURUT. — The Muruts of the Trusan river, North Sarawak, tatu very little; the men occasionally have a small scroll design just above the knee-cap and a simple circle on the breast; the women have fine lines tatued from the knuckles to the elbows [7, p. 93]. The Muruts of British North Borneo appear to be more generally tatued; the men are tatued like Dusuns, though, according to Hatton, they have three parallel stripes running from the shoulders to the wrists and no transverse lines on the forearm.[84] Whitehead [11, p. 76] figures a Murut woman of the Lawas river tatued on the arms from the biceps to the knuckles with numerous fine longitudinal lines; a band of zigzag design encircles the arm just above the commencement of the longitudinal lines. The design on a man of the same tribe is given on page 73 [11], it resembles "a three-legged dog with a crocodile's head, one leg being turned over the back as if the animal was going to scratch its ear." The part of the body on which the design was tatued, is not specified and the sketch is rather inadequate, so that it is impossible to tell for certain whether the design was tatued in outline only or whether the outline was filled in uniformly; our impression is that the outline only was tatued on this individual, and that it was employed either as an experiment or from idle amusement. Zoomorphs are conspicuous by their absence from all forms of decorative art amongst the Lawas Muruts, and the particular zoomorph noted here gives every evidence of an unpractised hand.

St. John states [7, p. 92] that the Muruts of the Adang river, a tributary of the Limbang, are tatued about the arms and legs, but he gives no details.

(D) KALABIT. — This tribe, dwelling in the watershed of the Limbang and Baram rivers, is closely akin to Muruts, but its tatu is very different. The men tatu but rarely, and then with stripes down the arms. The women, however, are decorated with most striking geometrical designs, shown on Pl. 142, Figs. 1 — 4. On the forearm are tatued eight bold zigzag bands, one-eighth of an inch broad, which do not completely encircle the arm, but stop short of joining at points on the ulnar side of the middle line on the flexor surface. The series of lines is known as BETIK TISU, the hand pattern. In some cases two short transverse lines, called TIPALANG, cross-lines, spring from the most distal zigzag at the point where it touches the back of the wrist on the radial side; in other cases these lines are tatued across the middle of the back of the wrist and two lozenges are tatued on the metacarpals; these are known as TEPARAT (Pl. 142, Fig. 1). The legs are tatued on the back of the thigh, on the shin, and sometimes on the knee-cap. The designs can best be explained by a reference to Pl. 142, Figs. 2 — 4; the part of the design marked A is termed BETIK BUAH, fruit pattern; B, betik lawa, trunk pattern; and C, BETIK LULUD, shin pattern. In Fig. 4, A and C are as before; D is BETIK KARAWIN; E, UJAT BATU, hill-tops; F, BETIK KALANG (Fig. 3).

Kalabit women are tatued when they are sixteen years old, whether they are married or unmarried, and the operation does not extend over a number of years as with the Long Glat and Kayans, nor is any elaborate ceremonial connected with the process.

(E) LONG UTAN. — An extinct Klemantan tribe, once dwelling on the Tinjar river, an affluent of the Baram. We owe our knowledge of their tatu to an aged Klemantan, who was well acquainted with the tribe before their disappearance; at our behest he carved on some wooden models of arms and legs the tatu designs of these people, but he was unable to supply any information of the names or significance of the designs. The men of the tribe apparently were not tatued, and the designs reproduced on Pl. 141, Figs. 5, 6, are those of the women. The essential features of the designs are spirals and portions of intersecting circles; the intersecting circles are frequently to be met with in the decorative art of Kenyahs, E.G. on the back of sword-handles, round the top of posts, on carved bamboos, etc., and in these cases the design is supposed to be a representation of the open fruit of a species of mango, MANGIFERA SP. It is not improbable that the design had the same significance amongst the Long Utan, for we have met with one or two representations of the same fruit amongst other Klemantan tribes.

(F) BIAJAU. — The Dutch author C. den Hamer [5, p. 451] includes under this heading the tribes living in the districts watered by the rivers Murung, Kahayan, Katingan, and Mentaja of South-west Borneo. Under this

very elastic heading he would include the Ot–Danum, Siang, and Ulu Ajar of Nieuwenhuis, but we treat of these in the next section. The ethnology of the Barito, Kahayan, and Katingan river–basins sadly needs further investigation; nothing of importance has been published on this region since the appearance of Schwaner's book on Borneo more than fifty years ago. We know really very little of the distribution or constitution of the tribes dwelling in these districts, and Schwaner's account of their tatu is very meagre. Such as it is, it is given here, extracted from Ling Roth's TRANSLATION OF SCHWANER'S ETHNOGRAPHICAL NOTES [7, pp. cxc. cxciv.]: The men of Pulu Petak, the right–hand lower branch of the Barito or Banjarmasin river, tatu the upper part of the body, the arms and calves of legs, with elegant interlacing designs and scrolls. The people of the Murung river are said to be most beautifully tatued, both men and women; this river is really the upper part of the Barito, and according to Hamer is inhabited by the Biajau (VIDE POSTEA), who appear to be distinct from the Ngaju of Schwaner, inhabiting the lower courses of the Barito and Kapuas rivers. The men of the lower left–hand branch of the Barito and of the midcourse of that river are often not tatued at all, but such tatu as was extant in 1850 was highly significant according to Schwaner's account; thus, a figure composed of two spiral lines interlacing each other and with stars at the extremities tatued on the shoulder signified that the man had taken several heads; two lines meeting each other at an acute angle behind the finger nails signified dexterity in wood–carving; a star on the temple was a sign of happiness in love. We have no reason to consider this information inaccurate, but we do consider it lamentable that more details concerning the most interesting forms of tatu in Borneo were not obtained, for it is only too probable that such information cannot be acquired now. The women of this tribe do not tatu. In the upper Teweh river, an upper tributary of the Barito the men are tatued a good deal, especially on parts of the face, such as the forehead, the cheeks, the upper lip. The only figures that Schwaner gives are reproduced by Ling Roth [7, p. 931, they represent two Ngajus; the tatu designs are drawn on too small a scale to be of much interest, and in any case we have no information concerning them. The two figures of 'Tatued Dyaks' (? Kayans) (after Professor Veth), on p. 95 of the above–cited work cannot be referred to any tribe known to us.

Hamer in his paper [5] gives a detailed account of Biajau tatu, but, unfortunately, without any illustrations; as abstracts of the paper have already been given by Ling Roth [7, pp. 93, 94] and by Hein [6, pp. 143 — 147], we will pass on to the next section.

(G) OT–DANUM, ULU AJAR, AND SIANG (Kapuas river, tributaries). — Concerning these tribes Nieuwenhuis says but little [9, p. 452], merely noting that the men are first tatued with discs on the calf and in the hollow of the knee and later over the arms, torso, and throat, whilst the women tatu the hands, knees, and shins. Two colours, red and blue, are used, and the designs are tatued free–hand, the instrument employed being a piece of copper or brass about four inches long and half an inch broad, with one end bent down at a right angle and sharpened to a point. Sometimes thread is wound round the end of the instrument just above the point, to regulate the depth of its penetration. Two specimens in the Leyden Museum are figured by Ling Roth [7, p. 85]. Hamer [5] says that the Ot–Danum women are tatued down the shin to the tarsus with two parallel lines, joined by numerous cross–lines, a modification of the Uma Tow design for the same part of the limb. On the thigh is tatued a design termed SOEWROE, said to resemble a neck ornament. A disc tatued on the calf of the leg is termed BOENTOER, and from it to the heel runs a barbed line called IKOEH BAJAN, tail of the monitor lizard; curiously enough, though this is the general name of the design, it is on the right leg also termed BARAREK, on the left DANDOE TJATJAH. Warriors are tatued on the elbowjoint with a DANDOE TJATJAH and a cross called SARAPANG MATA ANDAU.

A Maloh who had lived for many years amongst these people gave us the following information about their tatu: — There is with these people a great difference between the tatu of the high–class and that of the low–class individuals: amongst the former the designs are both extensive and complicated, too complicated for our informant to describe with any degree of accuracy, but they seem to be much the same as those described by Hamer. The low–class people have to be content with simpler designs; the men are tatued on the breast and stomach with two curved lines ending in curls, and on the outside of each arm with two lines also ending in curls (Pl. 142, Fig. 6); on the outside of the thigh a rather remarkable design, shown on Pl. 142, Fig. 7, is tatued; it is termed LINSAT, the flying squirrel, PTEROMYS NITIDUS, and on the back of the calf is tatued a disc termed KALANG BABOI, the wild pig pattern. The women are tatued as described by Hamer down the front of the shin with two parallel lines connected by transverse cross–bars; according to our informant the design was supposed to

represent a flat fish, such as a sole. (Pl. 142, Fig. 8.)

Of these people, as of so many others, the melancholy tale of disappearance of tatu amongst the present generation and replacement of indigenous by Kayan designs was told, and it seems only too likely that within the next decade or two none will be left to illustrate a once flourishing and beautiful art.

Schwamer can add nothing to the facts that we have collected, except the statement that "the BILIANS (priestesses) have brought the art of tatuing to the present degree of perfection through learning the description of the pretty tatued bodies of the [mythical] Sangsangs."

(H) KAHAYAN. — Our figure (Pl. 141, Fig. 3), and Pl. 81 of Dr. Nieuwenhuis' book [9], is the extent of our knowledge of the tatu of the inhabitants of the Kahayan river. The latter illustration shows a man tatued with a characteristic check pattern over the torso, stomach, and arms, but there is no reference to the plate in the text. Our figure is copied from a drawing by Dr. H. Hiller, of Philadelphia.

(I) BAKATAN AND UKIT. — As Nieuwenhuis has pointed out [9, p. 451], the tatu of these tribes is distinctive, inasmuch as most of the designs are left in the natural colour of the skin against a background of tatu; that is to say in the phraseology of the photographer, whilst the tatu designs of Kayans, Kenyahs, etc., are POSITIVES, those of the Bakatans are NEGATIVES. The men were formerly most extensively tatued, and we figure the principal designs (Pl. 143), most of which were drawn from a Bakatan of the Rejang river. The chest is covered with a bold scroll design known as GEROWIT, hooks (Kayan, KOWIT) (Figs. 1, 2); across the back and shoulder blades stretches a double row of circles, KANAK, with small hooks interposed (Fig. 9); on the side of the shoulder a pattern known as AKIH, the lizard, PLYCHOZOOM HOMALOCYPHALUM (Fam. Geckonidae), is tatued (Figs. 3, 4); this lizard is used as a haruspex by the Bakatan. Circles are tatued on the biceps, on the back of the thigh, and on the calf of the leg; a modification of the scroll design of the chest occurs on the flexor surface of the forearm. Another form of pattern for the calf of the leg is shown in Fig. 73, it is termed SELONG BOWANG, the horse-mango, MANGIFERA SP., the same fruit as that termed by Kayans IPA OLIM, and of which a representation forms the chief element in the Long Utan tatu. A series of short lines is tatued on the jaw, and is termed JA, lines, or KILANG, sword-pattern, and a GEROWIT design occurs under the jaw; the pattern on the throat is known also as GEROWIT (Fig. 10). On the forehead is sometimes tatued a star or rosette pattern called LUKUT, antique bead, and it appears that this is of the nature of a recognition mark. In jungle warfare, where a stealthy descent on an unprepared enemy constitutes the main principle of tactics, it not unfrequently happens that one body of the attacking force unwittingly stalks another, and the results might be disastrous if there was not some means of distinguishing friend from foe when at close quarters.[85] Kenyahs when on the warpath frequently tie a band of plaited palm fibre round the wrist for the same object. The tatu of the backs of the hands is avowedly copied from the Kayans, but has a different name applied to it — KUKUM. The metatarsus is tatued with broad bars, IWA, very like the foot tatu of Kayan women of the slave or of the middle class; lines known as JANGO encircle the ankle.

Tatuing is forbidden in the house; it can only be performed on the warpath, and consequently men only are the tatu artists. The covering of the body with designs is a gradual process, and it is only the most seasoned and experienced warriors who exhibit on their persons all the different designs that we have just detailed. The tatu of the legs and feet is the last to be completed, and the lines round the ankles are denied to all but the bravest veterans.

All that has been written above applies equally well to the Ukits, or at least once did apply, for now the Ukits have to a great extent adopted the tatu of the Kayan, and it is only occasionally that an old man tatued in the original, Ukit manner is met. We give a figure of a design on the back of the thigh of such a relic of better days. (Pl. 143, Fig. 5).

The Bakatan and Ukit women tatu very little, only the forearm, on the metacarpals, and on the back of the wrist; characteristic designs for these parts are shown in Fig. 74, and Pl. 143, Figs. 7, 8. The central part of the forearm design is an anthropomorphic derivative, judging by the name TEGULUN; the lines are termed KILANG, and KANAK and GEROWIT are also conspicuous; GEROWIT IS also the name of the design for the metacarpals; the two stars joined by a line on the wrist are termed LUKUT, and it is possible that their significance is the same as that of the Kayan LUKUT tatued in the same place by men, but we have no evidence that this is the case.

Nieuwenhuis figures [9, Pl. 80] a Bakatan tatued on the chest in the typical manner.



The only other designs, apparently of Kalamantan origin, are those figured by Ling Roth [7, p. 87]. Three of these are after drawings by Rev. W. Crossland, and are labelled "tatu marks on arm of Kapuas Kayan captive woman." The designs are certainly not of Kayan origin; the woman had in all probability been brought captive to Sarawak, where Mr. Crossland saw her, and it is unfortunate that exact information concerning the tribe to which she belonged was not obtained. The designs, if accurately copied, are so extremely unlike all that are known to us that we are not able to hazard even a guess at their provenance or meaning. The other design figured on the same page is copied from Carl Bock; it occurred on the shoulder of a Punan, and is said by Mr. Crossland to be commonly used by the Sea Dayaks of the Undup. We met with a similar example of it (Pl. 138, Fig. 7) on an Ukit tatued in the Kayan manner, but could get no information concerning it, and suppose that it is not an Ukit design. Hein [6, Fig. 90] figures the same design, and Nieuwenhuis [8, p. 240] alludes to a similar. We may note here that the designs figured on page 89 of Ling Roth's book [7] as tatu designs are in our opinion very probably not tatu designs. They were collected by Dr. Wienecke in Dutch Borneo, and appear to be nothing but drawings by a native artist of such objects in daily use as hats, seat-mats, baby-slings, and so on. We communicated with Dr. J. D. E. Schmeltz of the Leyden Museum, where these "tatu" marks are deposited, and learnt from him that they are indeed actual drawings on paper; there are ninety-two of them, apparently all are different isolated designs, and they are evidently the work of one artist.[86] There is not a tribe in Borneo which can show such a variety of tatu design, and indeed we doubt if ninety-two distinct isolated tatu designs could be found throughout all the length and breadth of the island. Moreover, as can be seen by reference to the cited work, the designs are of a most complicated nature, not figures with the outlines merely filled in, as in all tatu designs known to us, but with the details drawn in fine lines and cross-hatching, which in tatu would be utterly lost unless executed on a very large scale.

#### Sea Dayak Tatu.

The Sea Dayaks at the present day are, as far as the men are concerned, the most extensively tatued tribe in Borneo, with the exception of the Bakatans, Ukits, Kahayans, and Biajau; nevertheless, from a long-continued and close study of their tatu, we are forced to the conclusion that the practice and the designs have been entirely borrowed from other tribes, but chiefly from the Kayans. For some time we believed that there were two characteristically Sea Dayak designs, namely, that which is tatued on the throat (Figs. 75 and 76) and that on the wrist (Pl. 143, Fig. 7), but when later we studied Bakatan tatu we met with the former in the GEROWIT pattern on the throat of men, and the latter in the LUKUT design on the wrist of the women. A Sea Dayak youth will simply plaster himself, so to speak, with numerous isolated designs; we have counted as many as five of the ASU design on one thigh alone. The same design appears two or three times on the arms, and even on the breast, though this part of the body as well as the shoulders is more usually decorated with several stars and rosettes. The backs of the hands are tatued, quite irrespective of bravery or experience in warfare; in fact we have frequently had occasion to note that a man with tatued hands is a wastrel or a conceited braggart, of no account with Europeans or with his own people. This wild and irresponsible system of tatu has been accompanied by an inevitable degradation of the designs. There is a considerable body of evidence to show that the Sea Dayaks have borrowed much in their arts and crafts from tribes who have been longer established in Borneo; but it must be confessed that in their decorative art they have often improved upon their models; their bamboo carvings and their woven cloth are indeed "things of beauty." But their tatu involves, not an intelligent elaboration of the models, but a simplification and degradation, or at best an elaboration without significance. Figs. 1 -- 6, Pl. 137, are examples of the Sea Dayaks TUANG ASU or dog design. The figures show the dog design run mad, and it is idle to attempt to interpret them, since in every case the artists have given their individual fancies free play. When the profession of the tatu-artist is hereditary, and when the practice has for its object the embellishment of definite parts of the body for definite reasons, we naturally find a constancy of design; or, if there are varieties, there is a purpose in them, in the sense that the variations can be traced to pre-existing forms, and do not depart from the original so widely that their significance is altogether lost. With the borrowing of exogenous designs arises such an alteration in their forms that the original names and significance are lost. But when the very practice of tatu has no special meaning, when the tatu-artist may be any member of the tribe, and where no original tatu design is to be found in the tribe, then the borrowed practice and the borrowed designs, unbound by any sort of tradition, run complete riot, and any sort of fanciful name is applied to the degraded designs. Amongst the Kenyah tribes the modification and degradation of the dog design has not proceeded so far as amongst the Sea Dayaks, and this may

be explained by their more restrained practice of tatu and by the constant intercourse between them and the Kayans, for they always have good models before them. Pl. 137, Fig. 3, illustrates the extreme limit of degradation of the dog design amongst Sea Dayaks; it is sometimes termed KALA, scorpion,[87] and it is noteworthy that the representation of the chelae and anterior end of the scorpion (A) was originally the posterior end of the dog, and the hooked ends of the posterior processes of this scorpion design (B), instead of facing one another as they did when they represented the open jaws of the dog, now look the same way; the rosette-like eye of the dog still persists, but of course it has no significance in the scorpion. A curious modification of this eye is seen in another Sea Dayak scorpion design figured by E. B. Haddon [4, Fig. 19]. Furness [3, p. 142] figures a couple of scorpion designs, but neither are quite as debased as that which we figure here. Furness also figures a scroll design, not unlike a Bakatan design, tatued on the forearm, and termed TAIA GASIENG, the thread of the spinning wheel; a similar one figured by Ling Roth [7, p. 88] is termed TRONG, the egg plant. On the breast and shoulders some forms of rosette or star design are tatued in considerable profusion; they are known variously as BUNGA TRONG, the egg plant flower, TANDAN BUAH, bunches of fruit, LUKUT, an antique bead, and RINGGIT SALILANG. A four-pointed star, such as that shown in Fig. 64, is termed BUAH ANDU, fruit of PLUKENETIA CORNICULATA; since this fruit is quadrate in shape with pointed angles, it is evident that the name has been applied to the pattern because of its resemblance to the fruit. Furness figures examples of these designs and also Ling Roth [7, p. 88]. We figure (Figs. 75, 76, 77) three designs for the throat known sometimes as KATAK, frogs, sometimes as TALI GASIENG, thread of the spinning wheel, and no doubt other meaningless names are applied to them. Two of the figures (Figs. 75, 77) are evidently modifications of the Bakatan GEROWIT design, but here they are represented with the tatu pigment, whilst with the Bakatans the design is in the natural colour of the skin against a background of pigment, I.E. the Dayak design is the positive of the Bakatan negative. Furness figures two examples of the throat design, one with a transverse row of stars cutting across it; the same authority also figures a design for the ribs known as TALI SABIT, waist chains, consisting of two stars joined by a double zigzag line. The same design is sometimes tatued on the wrist, when it is known as LUKUT, antique bead; it is also tatued on the throat [7, p. 88], and attention has already been drawn to the probable derivation of this design also from a Bakatan model.

It is only very seldom that Sea Dayak women tatu, and then only in small circles on the breasts [7, p. 83] and on the calves of the legs.

As a conclusion to the foregoing account of Bornean tatu we add a table which summarises in the briefest possible manner all our information; its chief use perhaps will lie in showing in a graphic manner the blanks in our knowledge that still remain.

We do not consider that tatu can ever be of much value in clearing up racial problems, seeing how much evidence there is of interchange of designs and rejection of indigenous designs in favour of something newer; consequently we refrain from drawing up another scheme of classification of tatu in Borneo; at best it would be little more than a re-enumeration of the forms that we have already described in more or less detail.

#### Table showing the Forms of Tatu Practised by the Tribes of Borneo

Character of Designs. Part of Body Tatued. Cermonial. Object of Tatu.

Kayan [male] Isolated designs, representing the dog, a bead, rosettes and stars. Serial designs on hands. Inside of forearm, outside of thigh, breasts, wrist and points of shoulders. Back of hand sometimes. None Sign of bravery in some forms, to ward off illness in others.

[female] Serial designs of complex nature, geometrical, anthropo- and zoomorphic. The whole forearm, back of hand, the whole thigh, the metatarsal surface of the foot. Very elaborate Chiefly for ornament, for use after death, for cure of illness.

Kenyah [male] As amongst Kayans, with some degradation of design and alternation of name. Same as with Kayans. None Sign of bravery in some cases. Chiefly for ornament.

[female] As amongst Kayans. The whole forearm, back of hand, metatarsal surface of foot. None Ornament.

Kenyah-Kalamantan. Peng [male] Geometrical serial designs, discs, ? isolated designs. Arm from shoulders

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to wrist; calf of leg. ? ? Ornament.

[female] Designs employed by Kayan [male] [male] Forearms and legs. ? ? Ornament.

Lepu Lutong [female] Simple geometrical design. Forearm and back of hand. ? ?

Uma Tow [male] ? ? same as Kayan designs. ? ? ?

[female] Simple geometrical designs (low-class [female] [female]), anthropomorphic designs, copied from other tribes (high-class [female] [female]). Forearm and back of hand, front and sides of the thigh and the shin. Some. ?

Long Glat and Uma Luhah. [male] ? not at all.

?

[female] Complicated serial designs, chiefly of zoomorphic MOTIF. As with Kayan [female] [female], but also with lines round the ankles. Tatu of forearms not so extensive.

Chiefly ornament, for use in the next world.

Kalamantan.

Uma Long [female] Simple geometrical design ("stippled") Forearm and back of hand. ? ?

Dusun [male] Lines Stomach, breast, arm. None Partly as tally of enemies slain.

Murut [male] Scroll designs and circles Above the knee-cap; on the breast (Practice obsolescent). None. ?

[female] Parallel lines. Arm and back of hand. ? None. ? Ornament.

Kalabit [male] As with Dusuns As with Dusuns ? ?

[female] Zigzags and chevrons. Forearms, the lower part of the leg. Very little. ?

Long Utan [female] Complicated serial geometrical designs. As with Long Glat. ? ?

Biajau [male] Complicated serial geometrical designs, scrolls, zoomorphs, etc. Almost the whole body including the face amongst some of the sub-tribes. ? With some sub-tribes to signify success in war and love, manual dexterity, etc.

[female] ? ? ? ? as with Long Glat. ? ?

Ot-Danum, Ulu Ajar, etc. [male] Curved lines, discs, and simple geometrical designs. On breast, stomach, outside of arms and thighs, calf of leg. ? None. In some cases a sign of bravery.

[female] Simple designs like those of the Uma Tow Kenyahs (low-class [female] [female]). High-class [female] [female] like Long Glat? Shin, thigh, and calf of leg. ? ?

Kahayan [male] Chequer design. On breast, stomach, throat, arms. ? ?

Bakatan and Ukit [male] Chiefly scroll and circle designs. Nearly all represented in "negative." Jaws, throat, breast, back, shoulders, forearms, thighs, calf of leg, ankles, feet and backs of hands. Obsolete. Sign of bravery and experience in war, symbol of maturity.

[female] Anthropomorphic, lines, representation of a bead. Forearms, wrist, metacarpals. None. Ornament.

Sea-Dayak [male] Degraded Kayan and Bakatan designs. ALmost every part of the body, except the face. None. Ornament.

[female] Small circles. Breasts and calves of legs. None. Ornament.

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TATOUEEREN OF TOETANG BIJ DE BIADJOE-STAMMEN. 6. Hein, A. R., DIE BILDENDEN KUNSTE BEI DEN DAYAKS AUF BORNEO (1890). 7. Ling Roth, H., THE NATIVES OF SARAWAK AND BRITISH NORTH BORNEO (1896), vol. ii. 8. Nieuwenhuis, Dr. A. W., IN CENTRAL BORNEO (1900). vol. i. 9. Nieuwenhuis, Dr. A. W., QUER DURCH BORNEO (1904), vol. i. 10. Schwaner, Dr. C. A. L. M., BORNEO (1853 — 54); cf. Ling Roth, vol. ii. pp. cxci to cxcv. 11. Whitehead, J., EXPLORATION OF MOUNT KINA BALU, NORTH BORNEO (1893).

Brief references to tatu will also be found in the writings of Burns, Brooke Low, MacDougall, De Crespigny, Hatton, St. John, Witt, and others, but notices of all these will be found in Mr. Ling Roth's volumes.

Explanation of Plates.

Plate 136.

Fig. 1. — Kayan dog design (UDOH ASU) for thighs of men. From a tatu-block in the Sarawak Museum. (No. 1054.104.)

Fig. 2. — Uma Balubo Kayan dog design. From a tatu-block in the Sarawak Museum. (No. 1054.90.)

Fig. 3. — Sea Dayak scorpion design (KELINGAI KALA) for thigh, arm, or breast of men. From a tatu-block in the Sarawak Museum. (No. 1054.99.)

Fig. 4. — Kenyah dog design, copied from a Kayan model. From a tatu-block in the Sarawak Museum. (No. 1054.108.)

Fig. 5. — Kayan dog design. From a tatu-block in the Sarawak Museum. (No. 1054.106.)

Fig. 6. — Kayan dog design. From a tatu-block in the Sarawak Museum. (No. 1054.88.)

Fig. 7. — Kayan double dog design for outside of thigh of man. From a tatu-block in the Sarawak Museum. (No. 1054.31.)

Fig. 8. — Kayan designs of dog with pups (TUANG NGANAK). A=pup. For thigh of man. From a tatu-block in Sarawak Museum. (No. 1054.57.)

Fig. 9. — Kenyah jaws of centipede design (LIPAN KATIP), for breast or shoulder of man. From a tatu-block in the Sarawak Museum. (No. 1054.20.)

Fig. 10. — Kenyah crab design (TOYU). A=mouth (BA), B=claw (KATIP), C=back (LIKUT), D=tail (IKONG). From a tatu-block in the Sarawak Museum. (No. 1054.71.)

Plate 137.

Fig. 1. — Sea Dayak modification of the dog design. From a tatu-block in the Sarawak Museum. (No. 1054.102.)

Fig. 2. — (No. 1054.101.)

Fig. 3. — (No. 1054.67.)

Fig. 4. — (No. 1054.109.)

Fig. 5. — (No. 1054.70.)

Fig. 6. — But known as "scorpion" (KALA) pattern. From a tatu-block in the Sarawak Museum. (No. 1054.69.)

Fig. 7. — Barawan and Kenyah modification of the dog design, known as "hook" (KOWIT) pattern. From a tatu-block in the Sarawak Museum. (No. 1054.63.)

Fig. 8. — (No. 1054.75.)

Fig. 9. — Kenyah modification of the dog design, but known as the "prawn" (ORANG) pattern. From a tatu-block in the Sarawak Museum. (No. 1054.89.)

Plate 138.

Fig. 1. — Kayan three-line pattern (IDA TELO) for back of thigh of woman of slave class. From a tatu-block in the Sarawak Museum. (No. 166A Brooke Low Coll.)

Fig. 2. — Kayan four-line pattern (IDA PAT) for back of thigh of woman of middle class. From a tatu-block in the Sarawak Museum. (No. 1434.)

Fig. 3. — Kayan (Rejang R.) three-line pattern (IDA TELO) for back of thigh of women of upper and middle classes. From a tatu-block in the Sarawak Museum. (No. 1054.2.)

Fig. 4. — Kayan (Uma Pliau) design for front and sides of thigh of high class women. A = TUSHUN TUBA, tuba root; B = JALAUT, fruit of *PLUKENETIA CORNICULATA*; D = KOWIT, interlocking hooks. From a

tatu-block in coll. C. Hose.

Fig. 5. — Kayan design for front of thigh of woman of high class. A = TUSHUN TUVA; B = DULANG HAROK, bows of a boat; C = ULU TINGGANG, hornbill's head; D = BELILING BULAN, full moons. From a tatu-block in the Sarawak Museum. (No. 1432.)

Fig. 6. — Barawan design for the shoulder or breast of men. From a drawing.

Fig. 7. — Design of uncertain origin, on the calf of the leg of an Ukit man.

Plate 139.

Fig. 1. — Kayan (Rejang R.) design known as IDA TUANG or IDA LIMA for back of thigh of women of high rank. Note the hornbill heads at the top of the design. From a tatu-block in the Sarawak Museum. (No. 166D Brooke Low Coll.)

Fig. 2. — Kayan (Rejang R.) design; compare with Figs. 5 and 11. From a tatu-block in the Sarawak Museum. (No. 166C Brooke Low Coll.)

Fig. 3. — Long Glat hornbill design (after Nieuwenhuis). This is tatued in rows down the front and sides of the thigh.

Fig. 4. — Kayan (?) hornbill design, known, however, as the "dog without a tail" (TUANG BUVONG ASU). From a tatu-block in the Sarawak Museum. (No. 1054.8.)

Fig. 5. — Kayan (Rejang R.) tatu design known as "dog without a tail" (TUANG BUVONG ASU) pattern, for front and sides of thigh of women of high rank. From a tatu-block in the Sarawak Museum. (No. 166G, Brooke Low Coll.)

Fig. 6. — Kayan three-line and four-line design (IDA TELO and IDA PAT) for back of thigh of women of low class. From a tatu-block in the Sarawak Museum. (No. 1435.)

Fig. 7. — Uma Lekan Kayan anthropomorphic design (SILONG), tatued in rows down front and sides of thigh.

Fig. 8. — Kayan bead (LUKUT) design, tatued on the wrist of men.

Fig. 9. — „ „ „ „

Fig. 10. — „ „ „ „ From a tatu-block in the Sarawak Museum. (No. 1054.62.)

Fig. 11. — Portion of Uma Lekan Kayan design for back of thigh of women of high rank (after Nieuwenhuis). Plate 140.

Fig. 1. — Tatu design on the forearm of an Uma Lekan Kayan woman of high rank. From a rubbing of a carved wooden model in the Sarawak Museum. (No. 1398.)

Fig. 2. — Tatu design on the thigh of an Uma Lekan Kayan woman of high rank. From a rubbing of a carved wooden model in the Sarawak Museum. (No. 1398.)

Fig. 3. — Tatu design on the forearm of an Uma Phan Kayan woman of high rank. A = BELILING BULAN, full moons; B = DULANG HAROK, bows of a boat; C = KAWIT, hooks; D = DAUN WI, leaves of rattan; E = TUSHUN TUVA, bundles of tuba root. From a carved wooden model in the Sarawak Museum. (No. 1431.)

Fig. 4. — Kenyah design, representing the open fruit of a species of mango (IPA OLIM), tatued on breasts or shoulders of men. From a tatu-block in the Sarawak Museum. (No. 1054.14.)

Fig. 5. — Kayan (Baloi R.) KALANG KOWIT or hook design for back of thigh of woman of high rank. From a tatu-block in the Sarawak Museum. (No. 1054.54.)

Plate 141.

Fig. 1. — Design on the hand of a Skapan chief tatued in the Kayan manner. From a drawing.

Fig. 2. — Design on the arm of a Peng man. From a drawing by Dr. H. Hiller of Philadelphia.

Fig. 3. — Design on the arm of a Kabayan man. From a drawing by Dr. H. Hiller of Philadelphia.

Fig. 4. — Design on the forearm of a Lepu Lutong woman. From a drawing.

Fig. 5. — Design on the forearm of a Long Utan woman. From a rubbing of a carved model in the Sarawak Museum. (No. 1430.)

Fig. 6. — Design on the thigh of a Long Utan woman. From a rubbing of a carved model in the Sarawak Museum. (No. 1426.)

Fig. 7. — Kenyah design, representing the DURIAN fruit (USONG DIAN), tatued on the breasts or shoulders of men. From a tatu-block in the Sarawak Museum. (No. 1054.17.)

Plate 142.

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- Fig. 1. — Tatu design on the forearm of a Kalabit woman. From a drawing.
- Fig. 2. — Tatu design on front of leg of a Kalabit woman. C = BETIK LULUD, shin pattern. From a photograph.
- Fig. 3. — Tatu design on back of leg of a Kalabit woman. A = BETIK BUAH, fruit pattern; B = BETIK LAWA, trunk pattern. From a drawing.
- Fig. 4. — Tatu design on front of leg of the same Kalabit woman. D = BETIK KARAWIN; E = UJAT BATU, hill-tops. From a drawing.
- Fig. 5. — Tatu design on the forearm of an Uma Long woman. From a drawing.
- Fig. 6. — Tatu design on arms and torso of a Biajau man of low class. From a drawing by a Maloh.
- Fig. 7. — Tatu design on leg of Biajau man of low class. From a drawing by a Maloh.
- Fig. 8. — Tatu design on shin of Biajau woman of low class. From a drawing by a Maloh.
- Fig. 9. — Kajaman design representing the fruit of *PLUKENETIA CORNICULATA* (JALAUT), tatued on the breasts or shoulders of men. From a tatu-block in the Sarawak Museum. (No. 1054.21.)
- Fig. 10. — Tatu design on the biceps of an Ukit man, said to represent a bead (LUKUT). From a drawing. Plate 143.
- Fig. 1. — Design (GEROWIT, hooks) tatued on the breast of a Bakatan man. From a tatu-block in the collection of H.H. the Rajah of Sarawak.
- Fig. 2. — „
- Fig. 3. — Design (AKIH, tree gecko) tatued on the shoulder of a Bakatan man. From a drawing.
- Fig. 4. — „
- Fig. 5. — Design tatued on the calf of the leg of an Ukit. From a photograph.
- Fig. 6. — Tatu design on the foot of a Kayan woman of low class. From a drawing.
- Fig. 7. — Design representing an antique bead (LUKUT), tatued on the wrist of a Bakatan girl. From a drawing.
- Fig. 8. — Design (GEROWIT) tatued on the metacarpals of a Bakatan girl. From a drawing.
- Fig. 9. — Design (KANAK, circles) on the back of a Bakatan man. From a tatu-block.
- Fig. 10. — Design (GEROWIT) tatued on the throat of a Bakatan man. From a photograph.

## CHAPTER 13. Ideas of Spiritual Existences and the Practices Arising From Them

The Kayans believe themselves to be surrounded by many intelligent powers capable of influencing their welfare for good or ill. Some of these are embodied in animals or plants, or are closely connected with other natural objects, such as mountains, rocks, rivers, caves; or manifest themselves in such processes as thunder, storm, and disease, the growth of the crops and disasters of various kinds. There can be no doubt that some of these powers are conceived anthropomorphically; for some of them are addressed by human titles, are represented by carvings in human form, and enjoy, in the opinion of the Kayans, most of the characteristically human attributes.

Others are conceived more vaguely, the bodily and mental characters of man are attributed to them less fully and definitely; and it is probably true to say that these powers, all of which, it would seem, must be admitted to be spiritual powers (if the word spiritual is used in a wide sense as denoting whatever power is fashioned in the likeness of human will and feeling and intelligence), range from the anthropomorphic being to the power which resides in the seed grain and manifests itself in its growth and multiplication, and which seems to be conceived merely as a vital principle, virtue, or energy inherent in the grain, rather than as an intelligent and separable soul.[88]

It has been said of some peoples of lowly culture that they have no conception of merely mechanical causation, and that every material object is regarded by them as animated in the same sense as among ourselves common opinion regards the higher animals as animated. On the difficult question whether such a statement is true of any people we will not presume to offer an opinion; but we do not think that it could be truthfully made about any of the peoples of Borneo. It would be absurd to deny all recognition or knowledge of mechanical causation to people who show so much ingenuity in the construction of houses, boats, weapons, and a great variety of mechanical devices, such as traps, and in other operations involving the intelligent application of mechanical principles. These operations show that, though they may be incapable of describing in abstract and general terms the principles involved, they nevertheless have a nice appreciation of them. If a trap fails to work owing to its faulty construction, the trapper treats it purely as a mechanical contrivance and proceeds to discover and rectify the faulty part. It is true that in this and numberless similar situations a man's movements may be guided by his observation of omens; but if, after obtaining good omens, he has success in trapping, he does not attribute the successful operation of the trap to any, activity other than its purely mechanical movements; though it may be, and probably in some such cases is, true that the Kayan believes the omen bird to have somehow intervened to direct the animal towards the trap, or to prevent the animal being warned against it. The Kayan hangs upon the tomb the garments and weapons and other material possessions of the dead man;[89] and it would seem that he believes that some shadowy duplicate of each such object is thereby placed at the service of the ghost of the dead man. This, it might be argued, shows that he attributes to each such inert material object a soul, whose relation to the object is analogous to that of the human soul to the body. But such an inference, we think, would not be justified. As with the Homeric Greeks, the principle of intelligence and life is not to be altogether identified with the ghost, or shade, or shadowy duplicate of the human form that is conceived to travel to the Kayan Hades. The soul seems to be rather an inextended invisible principle; for, as the procedure of the soul-catcher[90] shows, it is regarded as capable of being contained within, or attached to, almost any small object, living or inert. It would seem, then, that after death the visible ghost or shade of a man incorporates and is animated by the soul; and that the visible shade of inert objects is, like themselves, inert and inanimate.

There is, then, no good reason to suppose that the Kayans attribute life, soul, or animation to inert material objects; and they do not explain the majority of physical events animistically.

The spiritual powers or spirits may, we think be conveniently regarded as of three principal classes: --

(1) There are the anthropomorphic spirits thought of as dwelling in remote and vaguely conceived regions and as very powerful to intervene in human life. Towards these the attitude of the Kayans is one of supplication and

awe, gratitude and hope, an attitude which is properly called reverential and is the specifically religious attitude. These spirits must be admitted to be gods in a very full sense of the word, and the practices, doctrines, and emotions centred about these spirits must be regarded as constituting a system of religion.

(2) A second class consists of the spirits of living and deceased persons, and of other anthropomorphically conceived spirits which, as regards the nature and extent of their powers, are more nearly on a level with the human spirits than those of the first class. Such are those embodied in the omen animals and in the domestic pig, fowl, dog, in the crocodile, and possibly in the tiger-cat and a few other animals.

(3) The third class is more heterogeneous, and comprises all the spirits or impalpable intelligent powers that do not fall into one or other of the two preceding classes; such are the spirits very vaguely conceived as always at hand, some malevolent, some good; such also are the spirits which somehow are attached to the heads hung up in the houses. The dominant emotion in the presence of these is fear; and the attitude is that of avoidance and propitiation.

### The Gods

The Kayans recognise a number of gods that preside over great departments of their lives and interests. The more important of these are the god of war, TOH BULU; three gods of life, LAKI JU URIP, LAKI MAKATAN URIP, and LAKI KALISAI URIP, of whom the first is the most important; the god of thunder and storms, LAKI BALARI and his wife OBENG DOH; the god of fire, LAKI PESONG; gods of the harvest, ANYI LAWANG and LAKI IVONG; a god of the lakes and rivers, URAI UKA; BALANAN, the god of madness; TOH KIHU, the god of fear; LAKI KATIRA MUREI and LAKI JUP URIP, who conduct the souls of the dead to Hades.

Beside or above all these is LAKI TENANGAN, a god more powerful than all the rest, to whom are assigned no special or departmental functions. He seems to preside or rule over the company of lesser gods, much as Zeus and Jupiter ruled over the lesser gods of the ancient Greeks and Romans.

The Kayans seem to have no very clear and generally accepted dogmas about these gods. Some assert that they dwell in the skies, but others regard them as dwelling below the surface of the earth. The former opinion is in harmony with the practice of erecting a tree before the house with its branches buried in the ground and the root upturned when prayers are made on behalf of the whole house; for the tree seems to be regarded as in some sense forming a ladder or path of communication with the superior powers. The same opinion seems to be expressed in the importance attached to fire and smoke in prayer and ritual. Fire, if only in the form of a lighted cigarette, is always made when prayers are offered; it seems to be felt that the ascending smoke facilitates in some way the communication with the gods.

While some gods, those of war and life, of harvest and of fire, are distinctly friendly, others, namely, the gods of madness and fear, are terrible and malevolent; while the god of thunder and those that conduct the souls to Hades do not seem to be predominantly beneficent or malevolent.

LAKI TENANGAN seems to be the supreme being of the Kayan universe. He is conceived as beneficent and, as his title LAKI implies, as a fatherly god who protects mankind. He is not a strictly tribal god, for the Kayan admits his identity with PA SILONG, and with BALI PENYLONG, the supreme gods of the Klemantans and Kenyahs respectively. In this, we think, the Kayan religion shows a catholicity which gives it a claim to rank very high among all religious systems.

LAKI TENANGAN has a wife, DOH TENANGAN, who, though of less importance than himself, is specially addressed by the women. The god is addressed by name in terms of praise and supplication; the prayers seem to be transmitted to him by means of the souls of domestic pigs or fowls;[91] for one of these is always killed and charged to carry the prayer to the god. At the same time a fire is invariably at hand and plays some part in the rite; the ascending smoke seems to play some part in the establishment of communication with the god. As an example of a prayer we give the following. The supplicant, having killed a pig and called the messengers of the god, cries, "Make my child live that I may bring him up with me in my occupations. You are above all men. Protect us from whatever sickness is abroad. If I put you above my head, all men look up to me as to a high cliff."

Similar rites are observed on addressing DOH TENANGAN. The following was given us as an example, "Oh! DOH TENANGAN, have pity upon me; I am ill — make me strong to-morrow and able to find my food."

The Kayans are not clear whether Laki Tenangan is the creator of the world. He does not figure in the Kayan creation myth.[92] There seems to be no doubt about his supremacy over the other gods; these are sometimes



asked by Kayans to intercede with him on their behalf.[93]

As regards the minor departmental gods, it is difficult to draw the line between them and the spirits of the third class distinguished above. All of them are approached at times with prayers and with rites similar to those used in addressing LAKI TENANGAN. Several wooden posts, very roughly carved to indicate the head and limbs of a human form, stand before every Kayan house. When the gods are addressed on behalf of the whole household, as before or after an important expedition, the ceremony usually takes place before one of these rudely carved posts.[94] But the post cannot be called an idol. It is more of the nature of an altar. No importance attaches to the mere posts, which are often allowed to fall away and decay and are renewed as required. A similar post may be hastily fashioned and set up on the bank of the river, if a party at a distance from home has special occasion for supplication.

An altar of a rather different kind is also used in communicating with the gods. It seems to be used especially in returning thanks for recovery of health after severe illness. It consists of a bamboo some four or five feet in length fixed upright in the ground. The upper end is split by two cuts at right angles to one another, and a fresh fowl's egg is inserted between the split ends (Pl. 145). Leaves of the LONG, (a species of CALADIUM), a plant grown on the PADI field for this purpose, are hung upon the post. These leaves serve merely to signalise the fact that some rite is going forward; they are also hung, together with a large sun hat, upon the door of any room in which a person lies seriously ill, to make it known as LALI or tabu; and in general they seem to be used to mark a spot as pervaded by some spiritual influence, or, in short, as "unclean." The bodies of fowls and pigs sacrificed in the course of the rites performed before such an altar-post are generally hung upon sharpened stakes driven into the ground before it, I.E. between it and the house, towards which the post, in the case of posts of the former kind, invariably faces; and the frayed sticks commonly used in such rites are hung upon the altar-post. Such posts are sometimes fenced in, but this is by no means always the case (Pl. 144).

The Kayans seek to read in the behaviour of the omen birds and in the entrails of the slaughtered pigs and fowls indications of the way in which the gods responds to their prayers. For they regard the true omen birds as the trusty messengers of the gods. After slaughtering the pigs or fowls to whose charge they have committed their petitions, they examine their entrails in the hope of discovering the answer of the gods; and at the same time they tell off two or three men to look for omens from the birds of the jungle.[95] If the omens first obtained are bad, more fowls and pigs are usually killed and omens again observed; and in an important matter, E.G. the illness of a beloved child, the process may be repeated many times until satisfactory omens are forthcoming. Whatever may have been the origin and history of such rites, it seems to be quite clear that the slaughtering of these animals is regarded as an act of sacrifice in the ordinary sense of the word, I.E. as an offering or gift of some valued possession to the spiritual powers; for, although on some occasions a pig so slaughtered is eaten, those stuck upon stakes before the altar-post are left to rot; and the idea of sacrificing, or depriving oneself of, a valued piece of property is clearly expressed on such occasions in other ways; E.G. a woman will break a bead of great value when her prayers for the restoration to health of a child remain unanswered, or on such an occasion a woman may cut off her hair.[96]

The custom of approaching and communicating with the gods through the medium of the omen birds, seems to be responsible in large measure for the fact that the gods themselves are but dimly conceived, and are not felt to be in intimate and sympathetic relations with their worshippers. The omen birds seem to form not only a medium of communication, but also, as it were, a screen which obscures for the people the vision of their gods. As in many analogous instances, the intercessors and messengers to whose care the messages are committed assume in the eyes of the people an undue importance; the god behind the omen bird is apt to be almost lost sight of, and the bird itself tends to become an object of reverence, and to be regarded as the recipient of the prayer and the dispenser of the benefits which properly he only foretells or announces.[97]

We have little information bearing upon the origin and history of these Kayan gods. But a few remarks may be ventured. The names of many of the minor deities are proper personal names in common use among the Kayans or allied tribes, such as JU, BALARI, ANYI, IVONG, URAI, UKA; and the title LAKI, by which several of them are addressed, is the title of respect given to old men who are grandfathers. These facts suggest that these minor gods may be deified ancestors of great chiefs, and this suggestion is supported by the following facts: —

First, a recently deceased chief of exceptional capacity and influence becomes not infrequently the object of a certain cult among Klemantans and Sea Dayaks. Men will go to sleep beside his grave or tomb, hoping for good

dreams and invoking the aid of the dead chief in acquiring health, or wealth, or whatever a man most desires. Sea Dayaks sometimes fix a tube of bamboo leading from just above the eyes of the corpse to the surface of the ground; they will address the dead man with their lips to the orifice of the tube, and will drop into it food and drink and silver coins. A hero who is made the object of such a cult is usually buried in an isolated spot on the crest of a hill; and such a grave is known as RARONG.

Secondly, all Kayans, men and women alike, invoke in their prayers the aid of ODING, LAHANG and his intercession with LAKI TENANGAN. That they regard the former as having lived as a great chief is clearly proved by the following facts: firstly, many Kayans of the upper class claim to, be his lineal descendants; secondly, a well-known myth,[98] of which several variants are current, describes his miraculous advent to the world; thirdly, he is regarded by Kayans, Kenyahs, and many Klemantans as the founder of their race.

The Kenyahs also invoke in their prayers several spirits who seem, like ODIN LAHANG, to be regarded as deceased members of their tribe; such are TOKONG and UTONG, and PA BALAN and PLIBAN. From all these descent is claimed by various Kenyah and Klemantan sub-tribes; and that they are regarded as standing higher in the spiritual hierarchy than recently deceased chiefs, is shown by the prefix BALI,[99] commonly given to their names, whereas this title or designation is not given to recently deceased chiefs; to their names the word URIP is prefixed by both Kayans and Kenyahs. The word URIP, means life or living; the exact meaning of this prefix in this usage is obscure, possibly it expresses the recognition that the men spoken of are, though dead, still in some sense alive.

A further link in this chain of evidence is afforded by the Kenyah god of thunder, BALINGO. This spirit, it would seem, must be classed among the departmental deities, being strictly the Kenyah equivalent of LAKI BALARI of the Kayans; and all the Kenyahs and many Klemantans seem to claim some special relation to BALINGO,[100] while one Madang (Kenyah) chief at least claims direct descent from him.[101]

The last mentioned instance completes the series of cases forming a transition from the well remembered dead chief to the departmental deity, the existence of which series lends colour to the view that these minor gods have been evolved from deceased chiefs. The weakness of this evidence consists in the fact that the series of cases is drawn from a number of tribes, and is not, so far as we know, completely illustrated by the customs or beliefs of any one tribe.

There is, then, some small amount of evidence indicating that the minor gods are deified ancestors, whose kinship with their worshippers has been forgotten completely in some cases, less completely in others. If this supposition could be shown to be true, it would afford a strong presumption in favour of the view that LAKI TENANGAN also has had a similar history, and that he is but PRIMUS INTER PARES. For among the Kayans, as we have seen, a large village acknowledges a supreme chief as well as the chiefs of the several houses of the village; and in the operations of war on a large scale, a supreme war chief presides over a council of lesser chiefs. And it is to be expected that the social system of the superior powers should be modelled upon that of the people who acknowledge them.

On the other hand, none of the facts, noted in connection with the minor gods as indicating their ancestral origin, are found to be true of LAKI TENANGAN, except only his bearing the title LAKI, which, as we have seen, is the title by which a man is addressed as soon as he becomes a grandfather. The name TENANGAN is not a proper name borne by any Kayans, nor, so far as we know, does it occur amongst the other peoples. LAKI in Malay means a male. The name is possibly connected with the Kayan word TENANG which means correct, or genuine. The termination AN is used in several instances in Malay (though not in Kayan) to make a substantive of an adjective. The name then possibly means — he who is correct or all-knowing; but this is a very speculative suggestion.

It is possible that the Kayans owe their conception of a supreme god to their contact with the Mohammedans. But this is rendered very improbable by the facts: firstly, that the Kayans have had such intercourse during but a short period in Borneo, probably not more than 300 years, (though they may have had such intercourse at an earlier period before entering Borneo); secondly, that among the Sea Dayaks, who have had for at least 150 years much more abundant intercourse with the Mohammedans of Borneo than the Kayans have had, the conception has not taken root and has not been assimilated.

The Kenyah gods and the beliefs and practices centering about them are very similar to those of the Kayans. This people also recognises a principal god or Supreme Being, whose name is BALI PENYLONG, and a number

of minor deities presiding over special departments of nature and human life. The Kenyahs recognise the following minor deities: BALI ATAP protects the house against sickness and attack, and is called upon in cases of madness to expel the evil spirit possessing the patient. A rude wooden image of him stands beside the gangway leading to the house from the river's brink; it holds a spear in the right hand, a shield in the left; it carries about its neck a fringed collar made up of knotted strips of rattan; the head of each room ties on one such strip, making on it a knot for each member of his roomhold. Generally a wooden image of a hawk, BALI FLAKI, stands beside it on the top of a tall pole.

The Kenyahs carve such images more elaborately than the Kayans, who are often content merely to indicate the eyes, mouth, and four limbs, by slashing away with the sword chips of wood from the surface of the log, leaving gashes at the points roughly corresponding in position to these organs. The Kenyahs treat these rude images with rather more care than do the Kayans; and they associate them more strictly with particular deities. The children of the house are not allowed to touch such an image, after it has been once used as an altar post; it is only when it is so used, and blood of fowls or pigs sprinkled upon it, that it seems to acquire its uncleanness."[102]

BALI UTONG brings prosperity to the house. BALI URIP is the god of life; he too has a carved altarpost, generally crowned with a brass gong. BALINGO is the god of thunder.

BALI SUNGEI is the name given to a being which perhaps cannot properly be called a god. He is thought of as embodied in a huge serpent or dragon living at the bottom of the river; he is supposed to cause the violent swirls and uprushes of water that appear on the surface in times of flood. He is regarded with fear; and is held to be responsible for the upsetting of boats and drownings in the river. It is not clear that he is the spirit of the river itself; for floods and the various changes of the river do not seem to be attributed to him.

BALI PENYALONG, like Laki Tenangen, has a wife BUNGAN. She is not so distinctly the special deity of the women folk as is DOH TENANGAN among the Kayans.

A special position in the Kenyah system is occupied by BALI FLAKI, the carrion hawk, which is the principal omen bird observed during the preparation for and conduct of war. Something will be said of the cult of BALI FLAKI in a later chapter; but we would note here that this bird is peculiar among the many omen-birds of the Kenyahs, in that an altar-post before the house is assigned to him, or at least one of the posts rudely carved to suggest the human figure is specially associated with BALI FLAKI, and in some cases is surmounted by a wooden image of the hawk. It seems to us probable that in this case the Kenyahs have carried further the tendency we noted in the Kayans to allow the omen birds to figure so prominently in their rites and prayers as to obscure the gods whose messengers they are; and that BALI FLAKI has in this way driven into the background, and more or less completely taken the place of, a god of war whose name even has been forgotten by many of the Kenyahs, if not by all of them.

Peculiar adjuncts of the altar-posts of the Kenyahs are the DRACAENA plant (whose deep red leaves are generally to be seen growing in a clump not far from them) and a number of large spherical stones, BATU TULOI. These are perpetual possessions of the house. Their history is unknown; they are supposed to grow gradually larger and to move spontaneously when danger threatens the house. When a household removes and builds for itself a new home, these stones are carried with some ceremony to the new site (Pl. 144).

We reproduce here a passage from a paper published by us some ten years ago[103] in which we ventured to speculate on the development of the Kenyah belief in a Supreme Being.

We cannot conclude without saying something as to, the possible origin of their conception of a beneficent Being more powerful than all others, who sends guidance and warnings by the omen birds, and receives and answers the prayers carried to him by the souls of the fowls and pigs. It might be thought that this conception of a beneficent Supreme Being has been borrowed directly or indirectly from the Malays. But we do not think that this view is tenable in face of the fact that, while the conception is a living belief among the Madangs, a Kenyah tribe that inhabits a district in the remotest interior and has had no intercourse with Malays, the Ibans, who have had far more intercourse with the Malays than have the Kayans and Kenyahs, yet show least trace of this conception. As Archdeacon Perham has written of the Ibans, there are traces of the belief in one supreme God which suggest that the idea is one that has been prevalent, but has now almost died out. We are inclined to suppose that the tribes of the interior, such as the Kenyahs and Kayans, have evolved the conception for themselves, and that in fact Bali Penyalong of the Kenyahs is their god of war exalted above all others by the importance of the department of

human activity over which he presides; for we have seen that they had been led to conceive other gods — Balingo, the god of thunder, Bali Sungei, the god of the rivers, whose anger is shown by the boiling flood, and Bali Atap, who keeps harm from the house, while the Kayans have gods of life, a god of harvesting, and other departmental deities. It seems to us that the only difficult step in such a simple and direct evolution of the idea of a beneficent Supreme Being is the conception of gods or spirits that perform definite functions, such as Bali Atap, who guards the house, and the gods that preside over harvesting and war, as distinct from such gods or nature-spirits as Balingo and Bali Sungei. But there seems to be no doubt that this step has been taken by these peoples, and that these various gods of abstract function have been evolved by them. And it seems to us that, were a god of war once conceived, it would be inevitable that, among communities whose chief interest is war and whose prosperity and very existence depend upon success in battle, such a god of battles should come to predominate over all others, and to claim the almost exclusive regard of his worshippers. Such a predominance would be given the more easily to one god by these people, because the necessity for strict subordination to their chiefs has familiarised them with the principles of obedience of subjects to a single ruler and of subordination of minor chiefs to a principal chief; while the beneficence of the Supreme Being thus evolved would inevitably result; for the god of battles must seem beneficent to the victors, and among these people only the victors survive. Again, this conception is one that undoubtedly makes for righteousness, because it reflects the character of the people who, within the community and the tribe, are decent, humane, and honest folk.

We are conscious of presumption in venturing to adopt the view that the conception of a beneficent Supreme Being may possibly be neither the end nor the beginning of religion, neither the final result of an evolution, euhemeristic, totemistic, or other, prolonged through countless ages and generations, nor part of the stock-in-trade of primitive man mysteriously acquired. Yet we are disposed to regard this conception as one that, amid the perpetual flux of opinion and belief which obtains among peoples destitute of written records, may be comparatively rapidly and easily arrived at under favourable conditions (such as seem to be afforded by tribes like the Kenyahs and Kayans, warlike prosperous tribes subordinated to strong chiefs), and may as rapidly fall into neglect with change of social conditions; and we suggest that it may then remain as a vestige in the minds of a few individuals only to be discerned by curious research, as among the Ibans or the Australian blacks, until another turn of Fortune's wheel, perhaps the birth of some overmastering personality or a revival of national or tribal vigour, gives it a new period of life and power.

We still regard as highly plausible the view suggested in this passage. We would add to what we have written only a few words in explanation of what may seem to be a difficulty in the way of this view. It was mentioned above that the Kayans recognise a god of war, TOH BULU. This fact may seem incompatible with the view that the idea of LAKI TENANGAN has been reached by exalting the god of war above his fellow-departmental deities; but it is not, we think, a fatal objection. For TOH BULU seems to be a god of but small account with the Kayans; his name figures but little in their rites; and the name itself indicates his subordinate position; for TOH is, as we have seen, the generic name for spirits of minor importance, and BULU is the Kayan word for feather; TOH BULU, literally translated, is then the feather-spirit or spirit of the feathers. It seems possible, therefore, that TOH BULU was nothing more than the spirit concerned with the hornbill's feathers, which are the emblems or badges of acknowledged prowess in battle; and that with the exaltation of the original god of war above his fellows, this minor spirit concerned in warfare has acquired a larger sphere and importance.

With the Kenyahs similar processes, we suggest, have led to the exaltation of BALI PENYALONG, the original god of war, into the position of the Supreme Being, and of BALI FLAKI, his special messenger, into the position, or almost into the position, of the god of war. This view derives, we think, considerable support from the fact that the Kenyahs recognise no special god of war; and in view of their tendency to create deities to preside over each of the great departments of nature and of human activity, the absence from their system of a special god of war requires some special explanation such as we have offered above.

The Klemantan gods are more numerous and more vaguely conceived, and the whole system seems more confused than that of the Kayans or Kenyahs. It is probable that the Klemantan tribes have borrowed freely from these more powerful neighbours. Many of them are very skilful in wood-carving, and it is probably largely owing to this circumstance that they make a larger number of images in human form. Some of these are kept in the house, while others stand before the house like those before the Kayan houses. The former are generally more highly regarded, and it is before them that their rites are generally performed. It seems not improbable that these

stand for the gods proper to these people, and those outside the house for the borrowed gods.

The supernatural beliefs and cults of the Sea Dayaks differ so widely from those described above that we think it best to bring together in one place (vol. ii., p. 85) what we have to say about them.

#### The Lesser Spirits of Ill-defined Nature

In the second of the three classes of spiritual beings distinguished above (vol. ii., p. 4) we put the souls of men and of some of the animals. Some account of beliefs connected with these will be given in the following two chapters. We conclude this chapter by describing the spirits of the third class, spirits or intelligent powers vaguely conceived, of minor importance, but imperfectly individualised and not regularly envisaged in any visible forms or embodied in any material objects. The generic Kayan name for spirits of this class is TOH. All the spirits of this class seem to be objects of fear, to be malevolent, or, at least, easily offended and capable of bringing misfortunes of all kinds upon human beings.

The most important of these TOH are perhaps those associated with the dried human heads that hang in every house. It seems that these spirits are not supposed to be those of the persons from whose shoulders the heads have been taken. Yet they seem to be resident in or about the heads, though not inseparable from them. They are said to cause the teeth of the heads to be ground together if they are offended or dissatisfied, as by neglect of the attentions customarily paid to the heads or by other infringement of custom. The heads are thus supposed to be animated by the TOH; if a head falls, through the breaking of the rattan by which it is suspended, it is said to have thrown itself down, being dissatisfied owing to insufficient attention having been paid to it. This animation of the heads by the TOH is illustrated by the treatment accorded by the people to the heads from the time they are brought into the house. Having been dried and smoked in a small hut made for the purpose, they are brought up to the house with loud rejoicings and singing of the war chorus. For this ceremony all members of the village are summoned from the fields and the jungle, and, when all are assembled in the houses, every one puts off the mourning garments which have been worn by all since the death of the chief for whose funeral rites the heads have been sought. Everyone having donned the ordinary attire, the men carry the heads in procession adorned with DAUN SILAT, the dried and frayed leaves of a palm, before one of the altar posts that stand between the house and the river. There fowls and pigs are sacrificed in the usual way, and their blood is scattered upon the assembled men with a wisp of shredded palmleaves.

Then the procession carries the heads into the house and up and down the gallery. The men dressed in their war coats, carrying shields and swords, drawn up in a long line, sing the war chorus, and go through a peculiar evolution, known as SEGA LUPAR. Each man keeps turning to face his neighbours, first on one side, then on the other, with regular steps in time with all the rest. This seems to symbolise the alertness of the warriors on the war-path, looking in every direction. The heads, which have been carried by old men, are then hung up over the principal hearth on the beam on which the old heads are hanging; they are suspended by means of a rattan, of which one end is knotted and the other passed upward through the FORAMEN MAGNUM and a hole cut in the top of the skull. After this the men sit down to drink, and the chief describes the taking of the heads, eulogising the warrior who drew first blood in each case, and who is credited with the glory of the taking of the head. Then follows a big feast, in every room a pig or fowl being killed and eaten; after which more BORAK is drunk, the war chorus breaking out spontaneously at brief intervals. BORAK is offered to the heads by pouring it into small bamboo cups suspended beside them; and a bit of fat pork will be pushed into the mouth of each. The heads, or rather the TOH associated with them, are supposed to drink and eat these offerings. The fact that the bits of pork remain unconsumed does not seem to raise any difficulty in the minds of the Kayans; they seem to believe that the essence of the food is consumed.

At all times the heads hanging in the house are treated respectfully and somewhat fearfully. When it is necessary to handle them, some old man undertakes the task, and children especially are prevented from touching them; for it is felt that to touch them involves the risk of madness, brought on by the offended TOH or spirits of the heads.

The fire beneath the heads is always kept alight in order that they shall be warm, and dry, and comfortable. On certain special occasions they are offered BORAK and pork in the way mentioned above.

On moving to a new house the heads are temporarily lodged in a small shelter built for the purpose, and are brought up into the house with a ceremony like that which celebrates their first installation. The Kayans do not care to have in the house more than twenty or thirty heads, and are at some pains occasionally to get rid of some

superfluous heads — a fact which shows clearly that the heads are not mere trophies of valour and success in war. The moving to a new house is the occasion chosen for reducing the number of heads. Those destined to be left are hung in a hut built at some distance from the house which is about to be deserted. A good fire is made in it and kept up during the demolition of the great house, and when the people depart they make up in the little head-house a fire designed to last several days. It is supposed that, when the fire goes out, the TOH of the heads notice the fact, and begin to suspect that they are deserted by the people; when the rain begins to come in through the roof their suspicions are confirmed, and the TOH set out to pursue their deserters, but owing to the lapse of time and weather are unable to track them. The people believe that in this way they escape the madness which the anger of the deserted TOH would bring upon them.

The precautions described in the foregoing paragraph illustrate very well the power for harm attributed to the TOH of the heads and the fear with which they are regarded. Nevertheless these beings are not wholly malevolent. It is held that in some way their presence in the house brings prosperity to it, especially in the form of good crops; and so essential to the welfare of the house are the heads held to be that, if through fire a house has lost its heads and has no occasion for war, the people will beg a head, or even a fragment of one, from some friendly house, and will instal it in their own with the usual ceremonies.

The TOH of the heads are but a few among many that are conceived as surrounding the houses and infesting the tombs, the rivers, the forests, the mountains, the caves, and, by those who live near the coast, the sea; in fact every locality has its TOH, and, since they are easily offended and roused to bring harm, the people are careful to avoid offence and to practise every rite by which it is thought possible to propitiate them. Death and sickness, especially madness, accidental bodily injuries, failure of crops, in fact almost any trouble may be ascribed to the malevolent action of Toh. Examples of the way conduct is influenced by this belief are the following: —

In clearing a patch of jungle in preparation for sowing PADI, it is usual to leave a few trees standing on some high point of the ground in order not to offend the TOH of the locality by depriving them of all the trees, which they are vaguely supposed to make use of as resting-places. Such trees are sometimes stripped of all their branches save a few at the top; and sometimes a pole is lashed across the stem at a height from the ground and bunches of palm leaves hung upon it; a "bull-roarer," which is used by boys as a toy, is sometimes hung upon such a cross-piece to dangle and flicker in the breeze.[104]

Again, young children are held to be peculiarly subject to the malevolent influence of the TOH. We have already mentioned that no name is given to a child until it is two or three years of age, in order to avoid attracting to it the attention of the TOH. For the same reason the parents dislike any prominent person to touch an infant; and if for any reason such contact has taken place, it is usual to give the mother a few beads, which she ties about the wrist or ankle of the child, "to preserve its homely smell" as they say, and so, it would seem, avoid the risk of the TOH being attracted by the unusual odour of the child. Parents who have lost several young children will give to a child, when the time comes for naming it, some such name as TAI (dung), or TAI MANOK (birds' dung), or JAAT (bad), in order that it may have a better chance of escaping the unwelcome attention of the TOH. If for any reason it is suspected that the attention of some evil-disposed TOH has been drawn to a child (and the same practice is sometimes observed by adults under similar circumstances), a sooty mark is made upon the forehead, consisting of a vertical median line and a horizontal band just above the eyebrows. This is thought to render it difficult for the TOH to recognise his victim. Such a black mark is worn more especially on going away from the house. Sea Dayaks sometimes go farther under such circumstances. They place the new-born child in a small boat and allow it to float down river, and standing upon the bank call upon all the evil spirits to take the child at once, if they mean to take it, in order that the parents may be spared the greater bereavement of losing it some years later. If, after floating some distance down stream, the child is found unhurt, it is carried home, the parents feeling some confidence that it will be "spared" to grow up

Again, on going to the territory of people who have recently come to friendly terms with their village, men will make a black mark across the forehead with soot in order to disguise themselves from the TOH of this region. In the main, although all regions are infested with TOH those of the locality in which a man dwells are regarded by him as less dangerous than those of other parts; for experience has shown him that in the neighbourhood of his own village he may behave in certain ways with impunity, whereas in distant regions all is uncertain. It is for this reason that, when boys enter any river or branch of the river for the first time, a special rite is performed. An old man will take them apart from the company to some spot on the bank of the river, and, calling all the spirits of the

place, will ask them to favour the boys and to give them vigorous life. An egg (which on this occasion is spoken of only by the name OVE = sweet potato) is offered to the spirits on behalf of each boy (or sometimes merely a fowl's feather) by placing it in the split end of a bamboo stick thrust into the ground. Not until this rite has been performed are the boys considered to be safe in the strange region.

The more remote and inaccessible the region, the more are the TOH of it feared; rugged hill tops and especially mountain tops are the abodes of especially dangerous TOH, and it was only with difficulty that parties of men could be induced to accompany us to the summits of any of the mountains.

The influence of the TOH is not always pernicious; certain spots become credited with the presence of TOH of benign influence. Thus, tradition relates of a streamlet (Telang Ading) falling over the rocky bank of the Baram river some little distance below the mouth of the AKAR, that a wild pig recently killed with spears fell into it and was allowed to lie there, and that after a little while it jumped up and made off. Through this event the streamlet has acquired a great reputation, and passing boats generally stop in order that the crews may splash some of the water on their heads and faces, and so be cured of any ailments they may happen to have at the time. These therapeutic effects are attributed to the TOH of the stream.

The TOH play a considerable part in regulating conduct; for they are the powers that bring misfortunes upon a whole house or village when any member of it ignores tabus or otherwise breaks customs, without performing the propitiatory rites demanded by the occasion. Thus on them, rather than on the gods, are founded the effective sanctions of prohibitive rules of conduct. For the propitiation of offended TOH fowls' eggs and the blood of fowls and of young pigs are used, the explanations and apologies being offered generally by the chief or some other influential person, while the blood is sprinkled on the culprit or other source of offence.

The beliefs and practices of the Kenyahs and Klemantans in regard to spirits of this class are very similar to those of the Kayans. They designate them by the same general name, TOH.

We are doubtful whether the Sea Dayaks can properly be said to have any religion. They believe in a number of mythical and legendary heroes in whose honour they indulge in heavy feasting; but none of these seem to be credited with the attributes of a god, or to evoke on the part of the people the specifically religious emotions and attitudes — awe, reverence, supplication, trust, gratitude, and hope. Their cult of the PETARA seems to show traces of Javanese and Hindu influence or origin. They believe in a multitude of ill-defined spirits which they speak of as ANTU, and towards which their attitude is very similar to that of the Kayans towards the TOH. Some further account of Iban superstitions will be found in Chapter XV.

## CHAPTER 14. Ideas of the Soul Illustrated by Burial Customs, Soul-Catching, and Exorcism

As among ourselves, several very different systems for the cure of sickness are practised among the Kayans, and these seem to imply very different theories of the cause of disease. But the Kayans, less consistent or more open-minded than ourselves, are not divided into sects, each following one system of therapeutics, but rather the various systems are held in honour by all the people, and one or the other is applied according to the indications of each case. Thus, bodily injuries received accidentally or in battle are treated surgically by cupping, splints, bandaging, and so forth. Familiar disorders, such as malarial fever, are treated medically, I.E. by rest and drugs. Cases of severe pain of unknown origin are generally attributed to the malign influence of some TOH,[105] and the method of treatment is usually that of extraction.[106] Madness also is generally attributed to possession by some TOH. But in cases of severe illness of mysterious origin that seems to threaten to end mortally, the theory generally adopted is that the patient's soul has left his body, and the treatment indicated is therefore an attempt to persuade the soul to return. The first two modes of treatment are not considered to demand the skill of a specialist for their application, but the third and fourth are undertaken only by those who have special powers and knowledge.

Among the Kayans the professional soul-catcher, the DAYONG, is generally a woman who has served a considerable period of apprenticeship with some older member of the profession, after having been admonished to take up this calling by some being met with in dreams — often a dream experienced during sickness. The DAYONG does not necessarily confine his or her activities to this one calling; for in a large village there are usually several DAYONGS, and the occasions demanding their services recur at considerable intervals of time. The relatives of the sick man usually prefer to call in a DAYONG from some other village. The DAYONG is expected to make the diagnosis and to determine upon the line of treatment to be practised. If he decides that the soul or BLUA of the patient has left his body, and has made some part of the journey towards the abode of departed souls, his task is to fall into a trance and to send his own soul to overtake that of his patient and to persuade it to return. The ceremony is usually performed by torch-light in the presence of a circle of interested relatives and friends, the patient being laid in the midst in the long public gallery of the house.

The DAYONG struts to and fro chanting a traditional form of words well known to the people, who join in the chorus at the close of each phrase, responding with "BALI-DAYONG," [107] I.E. "Oh powerful DAYONG;" the meaning and intention of this chorus seem to be that of the "Amen" with which a Christian congregation associates itself with the prayer offered by its pastor. For the chant with which the DAYONG begins his operations is essentially a prayer for help addressed to LAKI TENANGAN, or, in case of a woman, to DOH TEMANGAN also.

The DAYONG may or may not fall and lie inert upon the ground in the course of his trance; but throughout the greater part of the ceremony he continues to chant with closed eyes, describing with words and mimic gestures the doings of his own soul as it follows after and eventually overtakes that of the patient. When this point is reached his gestures generally express the difficulty and the severity of the efforts required to induce the soul to return; and the anxious relatives then usually encourage him by bringing out gongs or other articles of value, and depositing them as additions to the DAYONG'S fee. Thus stimulated, he usually succeeds in leading back the soul towards the patient's body. One feature of the ceremony, not quite logically consistent with its general scheme, is that the DAYONG takes in his hand a sword and, glancing at the polished blade with a startled air, seems to catch in it a glimpse of the wandering soul.[108] The next step is to restore the soul to the body. The DAYONG comes out of his trance with the air of one who is suddenly transported from distant scenes, and usually exhibits in his palm some small living creature, or it may be merely a grain of rice, a pebble, or bit of wood, in which the captured soul is in some sense contained. This he places on the top of the patient's head, and by rubbing causes it to pass into the head. The soul having been thus restored. to the body, it is necessary to prevent it escaping again; and this is done by tying a strip of palm-leaf about the patient's wrist.



A fowl is then killed, or, in very severe cases of sickness, a pig, and its blood is sprinkled or wiped by means of the sword or knife upon this confining bracelet. In mild cases the fowl may be merely waved over the head of the patient without being killed. The DAYONG then gives directions as to the MALAN (the tabus) to be observed by the patient, especially in regard to articles of diet, and retires, leaving his fee to be sent after him.

This ceremony clearly involves a curious confusion of symbolical and descriptive acts, which are not ordered in strict consistency with any clearly defined theory of the nature of the soul and of its relations to the body, or of the exact nature of the task of the soul-catcher.

The catching of souls is practised in very similar fashion among all the peoples of Borneo, even by the Punans, though the details of the procedure differ from tribe to tribe.

Mental derangement is commonly attributed to possession by evil TOH, and exorcism is practised among some of the tribes, but very little by the Kayans, who generally content themselves with confining any troublesome madman in a cage.

No doubt the catching of the soul does make strongly for the recovery of the patient, through inspiring him with hope and confidence. But it cannot always stave off death. If, in spite of the operations of one soul-catcher, the patient's strength still sinks, some other practitioner is usually called in for consultation. In the case of a chief the help of three or even four may be invoked successively or together; and the ceremony of catching the soul may be repeated again and again with greater elaboration of detail, and may be prolonged through many hours and even days with brief interruptions.

When all these efforts prove unavailing, despairing relatives sometimes put the end of a blow-pipe to the dying or dead man's ear (or merely their lips) and shout through it, "Come back, this is your home, here we have food ready for you." Sometimes the departed soul is believed to reply, "I am far from home, I am following a TOH and don't know the way back."

If, in spite of all these efforts, the patient dies, a drum is loudly beaten (or in case of a female a TAWAK) in order to announce the decease to relatives and friends gone before, the number of strokes depending upon the rank and sex of the departing spirit. The corpse is kept in the house during a period which varies from one night for people of the lower class, to three nights for middle class folk, and ten days for a chief. During this time the dead man lies in state. The corpse has a bead of some value under each eyelid; [109] it is dressed in his finest clothes and ornaments, and is enclosed within a coffin hollowed from a single log, the lid of which is sealed with resin and lashed round with rattans.

The coffin is covered with a particular design in red and black and white, and is placed in the gallery on a low platform, surrounded by the most valuable personal property of the dead man, whose family will take pains to make the display of property as imposing as possible. A fire is kept burning near the coffin, and small packets of cooked rice and of tobacco are placed upon it for the use of the dead man's soul. Hundreds of cigarettes are hung in bundles about the platform by people of the house, sent by them as tokens of kindly remembrance to their departed friends, who are believed to be able to recognise by smell the hands that made each bundle. During the whole period the dead man is attended continuously by at least two or three mourners, either relatives or, more rarely, hired mourners, who from time to time throughout both day and night wail loudly, renewing their wailing at the arrival of each party of friends or relatives.

These parties come in from neighbouring villages in response to news of the death sent them by special messengers, and in the case of an influential chief several thousand men and women sometimes congregate in this way to do him honour.

Upon the arrival of any person of importance, gongs and drums are beaten, and the dead man is informed of the fact by the DAYONG or by a relative. The visitor is led to a scat near the coffin, where he will sit silently or join in the wailing, until after a few minutes he enters into conversation with his hosts. When all the expected guests have arrived, pigs are slaughtered and a feast is made.

While the coffin lies in the house all noises other than the wailing are avoided in its immediate neighbourhood, and the children, dogs, and fowls are kept away from it. The DAYONG will sit beside the coffin occasionally brandishing a sword above it in order to keep in check the TOH who, attracted to the neighbourhood of the corpse, might grow too bold.

On the day appointed for the removal of the corpse it is the duty of the DAYONG to instruct the dead man's soul how to find his way to the other world; this he does, sitting beside the coffin and chanting aloud in doleful

tones. For (curiously enough in view of the theory implied by the soul-catching ceremony) the man's soul is regarded as remaining in, or in the proximity of, the body so long as it remains in the house. This is one of several indications that the Kayans vaguely distinguish two souls — on the one hand the ghost-soul or shade, which in dreams wanders afar, on the other hand the vital principle. It would seem that so long as this vital spark remains in the body the ghost-soul may return to it; but that, when death is complete, this vital spark also departs, and then the ghost-soul will return no more.

The use of the word URIP further bears out this interpretation. In common speech URIP means alive, but it is applied also as a prefix to the names of those recently deceased, and seems to mark the speaker's sense of the continuance of the personality as that which has life in spite of the death of the body.

Thus BLUA and URIP seem to mark a distinction which in Europe in different ages has been marked by the words soul and spirit, ANIMA and ANIMUS, psyche and pneuma, and which was familiar also to the Hebrews. In this, of course, Kayan thought on this subject does but follow on the lines of many other peoples of more advanced civilisation.

When the DAYONG has completed his instructions, the rattan lashings about the head of the coffin are loosed. Since this is the moment at which the soul is believed to take its final departure from the body, it is probable that this custom of unlashings the coffin is connected with the idea of facilitating its escape, although we have obtained no definite statement to this effect. At the same time the fire that has been kept burning by the coffin is allowed to die out. To the coffin, which is shaped roughly like a boat, two small wooden figures are attached — a figure of a woman at the head, a male figure at its foot. These figures are not improbably a vestige of a bygone custom of killing slaves, whose souls would row the boat of the dead man on his journey to the other world. This interpretation is borne out by the fact that a live fowl is usually tied to one of these wooden figures. The coffin is then conveyed out of the house by lowering it to the ground with rattans, either through the floor, planks being taken up for the purpose, or under the caves at the side of the gallery. In this way they avoid carrying it down the house-ladder; and it seems to be felt that this precaution renders it more difficult for the ghost to find its way back to the house.[110] All this is done with great deliberation, the coffin being brought by easy stages to the river bank. There it is laid in a large boat gaily decorated with bright-coloured cloths, which is paddled down river to the graveyard, followed by the boats of the mourning friends, who refrain from speaking to any persons encountered on the way. The tombs of the village are on the river bank some quarter of a mile below the house, generally on the opposite bank. Here the final resting-place of the coffin has been prepared by erecting a great log of timber, which is large in proportion to the social standing of the dead man. In the case of a chief the log is of ironwood, some three feet or more in diameter and some thirty feet in length. One end of this is sunk some four or five feet into the ground. The erecting of such a massive support is a task of some difficulty, achieved by first digging the pit at the foot of the log and then hauling up the other end with a rough windlass. The upper end, which is always the root-end of the log, is cut in the form of a deep cleft, just wide enough to receive the coffin. Above the cleft a large slab of hardwood forms a cover for the coffin, and this is often elaborately carved (see Pls. 152, 153). In some cases two, and in others even four, smaller poles are used for the support of the coffin, but this usually only to avoid the labour of erecting one very large one. The coffin is lifted into this cleft by the aid of a scaffolding which is built around the large pole, and which afterwards falls away when the lashings are cut. On landing at the graveyard the mourners carry the coffin between the two parts of a cleft pole which are fixed in the ground so as to make a large V (this is called NYRING, the wall), and all the mourners are expected to pass through this cleft, each, in doing so, placing his foot upon a fowl which is laid bound upon the ground. The coffin is then lifted to its cleft, and the weapons, implements, and war clothes, the large hat, the cooking-pot, and in fact any articles of personal property that may be of use to the departing soul, are hung upon the tomb.[111] If a gong is hung up, it may be cracked or pierced beforehand, but it is not usual among Kayans to spoil other articles before hanging them on the tomb.[112] The scaffolding about the tomb is then caused to fall away, and it only remains for the mourners to purify themselves. This they do with the help of the lower jaws of the pigs that were consumed at the funeral feast. The jaws are placed together with water in a gong or other basin, and the DAYONG, taking a fowl's feather, sprinkles drops of water from the basin upon all the assembled mourners, pouring out the while a stream of words, the purport of which is — may all evil things, all sickness and such things be kept away from you. Then the mourners return in a single file through the V formed by the cleft pole, each one again placing his foot on the fowl (which dies before the end of the ceremony), spitting as he goes

through, and exclaiming, "Keep off evil" (BALI JAAT, I.E. literally, spiritual or supernatural evil). When all have passed through, the upper ends of the two parts of the cleft pole are brought together and lashed round with rattans; and a small tree, pulled up by the roots, and having its branches cut away, is laid beside the pole with its roots turned towards the grave (this is called SELIKANG); and on the other side of the pole is put another vertical pole with a cross-piece tied at its upper end. Fire is left burning beside these structures. In this way the Kayans symbolically prevent any of the uncanny influences of the graveyard following the party back to the house; though they do not seem to be clear as to whether it is the ghosts of the dead, or the TOH of the neighbourhood, or those which may have contributed to his death, against whom these precautions are taken. This done, the whole party returns as quickly as possible to the village, halting only to bathe on the way.

The whole household of which the dead man was a member continues in mourning for a period which is long in proportion to his social standing; the mourning rules are observed most strictly by the nearest relatives. The signs of mourning are the wearing of bark-cloth or of clothes made yellow with clay, allowing the hair to grow on the parts of the head and face usually kept shaved,[113] and the putting aside of ornaments such as ear-rings, necklaces, or the substitution of wooden ear-rings for the metal ones commonly worn by the women. All music, feasts, and jollifications are avoided. The period of mourning can only be properly terminated by a ceremony in which a human head plays an essential part. Where the influence of the European governments has not made itself felt, the death of a chief necessitates the procuring of a fresh head, and a party may be sent out to cut off in the jungle, on the farms, or on the river, some small party of a hostile village. The common people must postpone the termination of their mourning until some such occasion presents itself. Nowadays in the districts in which head hunting has been suppressed, an old head, generally one surviving from an earlier period, is borrowed or begged for the purpose from another village, and is brought home with all the display properly belonging to a return from successful war (see Chap. X). As soon as the head is brought into the house the period of mourning terminates amid general rejoicing. The head, or a fragment of it, or the bundle of palm leaves (DAUN ISANG) with which it has been decorated, is hung upon the tomb.[114]

In case of any dispute regarding the division of the property of a dead man, his ghost may be called upon by a DAYONG and questioned as to the dead man's intentions; but this would not be done until after the harvest following upon the death. The ceremony is known as DAYONG JANOI. A small model of a house, perhaps a yard in width and length, is made and placed in the gallery beside the door of the dead man's chamber. Food and drink of various kinds as prepared for a feast are placed in this house, together with cigarettes. The DAYONG chants beside the house, calling upon the soul of the dead man to enter the soul-house, and mentioning the names of the members of his family. From time to time he looks in, and after some time announces that all the food and drink has been consumed. The people accept this statement as evidence that the ghost has entered the soul-house.[115] The DAYONG acts as though listening to the whispering of the soul within the house, starting and clucking from time to time. Then he announces the will of the ghost in regard to the distribution of the property, speaking in the first person and reproducing the phraseology and peculiarities of the dead man.[116] The directions so obtained are usually followed, and the dispute is thus terminated. But in some cases the people apply a certain test to verify the alleged presence of the ghost. A shallow dish (often a gong) of water is placed near the soul-house, and a ring-shaped armband of shell is placed vertically in this basin, the water covering its lower half. A few fine fibres of the cotton-seed are thrown on to the surface of the water, and by tapping on the planks the people keep these in movement. If the threads float through the ring, that is conclusive evidence of the presence of the ghost; but so long as the threads cannot be got to pass through the ring, the people are not satisfied that the ghost is present.

#### Ideas of Life After Death

The soul of the dead man is supposed to wander on foot through the jungle until he reaches the crest of a mountain ridge. From this point he looks down upon the basin of a great river, the LONG MALAN, in which five districts are assigned as the dwelling-places of souls, the destination of each being determined by the mode of death. The ghosts of those who die through old age or disease go to APO LEGGAN, the largest of these districts, where they live very much as we do in this life. Those who die a violent death, whether in battle or by accident, go to the basin of a tributary river, LONG JULAN, where is BAWANG DAHA (lake of blood); there they live in comfort, and become rich though they do no work: they have for wives the ghosts of women that have died in

child-bed. Those that have been drowned find a home beneath the rivers, and are supposed to become possessed of all property lost in the water by their surviving friends; this place (or places) bears the name of LING YANG. The souls of still-born children dwell in TENYU LALU; they are believed to be very brave, owing to their having experienced no pain in this world. Finally, suicides [117] have assigned to them a special district, TAN TEKKAN, where they live miserably, eating only roots, berries, and other jungle produce.

Other districts of this great country are vaguely assigned to the souls of Malays and other peoples. It is generally said that the left bank of the river is the place of the tribes of Borneo, while the right bank is assigned to all other peoples; and the soul is especially warned by the DAYONG to avoid the right bank lest it should find itself among foreigners. These beliefs seem to involve some faint rudiment of the doctrine of POST-MORTEM retribution or, at least, compensation, — a rudiment which does not appear in the beliefs of the other peoples.

The departed soul standing on the mountain ridge surveys these regions; and it is not until he stops here to rest that he becomes aware that he is finally separated from his body. This fact is brought home to him by the arrival of the ghost-souls of the various articles hung upon his tomb, which hurry after him, but only overtake him at this his first resting-place; and he bewails his unhappy fate.

There are current among Kayans several versions of the further journey of the soul. The ghost descends the mountain to the banks of LONG MALAN, which river he must cross to reach his appointed place. The river must be crossed by means of a bridge consisting of a single large log suspended from bank to bank. This log, BITANG SEKOPA, is constantly agitated by a guardian, MALIGANG by name. If the ghost has during the earthly life taken a head, or even merely taken part in a successful head-hunting raid, a fact indicated by the tatuing of the hands, he crosses this bridge without difficulty; but if not, he falls below and is consumed by maggots or, according to another version, is devoured by a large fish, PATAN, and so is destroyed. When the ghost reaches the other bank, he is greeted by those of his friends who have gone before, and they lead him to their village. Some part of the journey is generally regarded as made by boat, though it is not possible to make this fit consistently into the general scheme. Another point on which opinion is very vague is the part played by LAKI JUP URIP, a deity or spirit whose function it is to guide the souls to their proper destinations.

In many Kayan villages stories are told of persons who are believed to have died and to have come to life again. This belief seems to have arisen in every case from the person having lain in a trance for some days, during which he was regarded as dead. The Kayans accept the cessation of respiration as evidence of death, and they assert that these persons cease to breathe. [118]

It seems that such persons usually give some account of their experiences during the period in which they have deserted their bodies. They usually allege that they have traversed a part of the road to the land of shades, and describe it in terms agreeing more or less closely with the traditional account of it current among the Kayans. Since in these cases the person is thought to be dead, no efforts are made by the DAYONG to lead back his departing soul, and its return has to be explained in some other way. In some cases the returned soul describes how he was turned back by MALIGANG, the awful being who guards the bridge across the river of death. [119]

Mr. R. S. Douglas, Resident of Baram, has recently reported a similar belief held by the Muriks, a Klemantan tribe, where it is supported by the following legend. The soul or spirit of a certain man, UKU PANDAH by name, left his body two years before the time appointed as the term of its incorporate life, and gained admittance to the land of shades in the shape of a pig. It was, however, recognised by the ruler of that land, and ordered by him to return to its mortal body. The command was obeyed, and UKU PANDAH, having been dead for two days, came to life again and lived for two years, during which he described to his friends the country of the dead of which he had thus obtained a glimpse; and this knowledge has been preserved by the tribe.

The beliefs and traditions of the various tribes in regard to the other world seem to have been confused through the intercourse between them, so that it is not possible to mark off clearly what features properly belong to each of the tribes. The general features are similar with all the peoples. The Kenyah story is very similar to that of the Kayans, though the names of the various places are different, and they usually conceive the first part of the soul's journey as being made by boat on the river.

TAMA KAJAN ODOH, the MADANG chief whose line of descent from BALINGO is given on p. 12, vol. ii., made us a rough map of the land of the shades (Fig. 78) and of the country traversed by the ghost on its journey thither. This was done in the way maps of their own country are always made by the Borneans, namely, he laid upon the floor bits of stick and other small objects to represent the principal topographical features and

relations. We tested the trustworthiness of his account by asking him to repeat it on a subsequent occasion; when he did so without any noteworthy departure from the former description. A point of special interest is the appearance in the land of shades of the house of BALI PENYALONG and of OKO PERBUNGAN (which seems to be the MADANG name for the wife of the Supreme Being). This map brings out clearly what seems to be the essential feature of all these schemes, namely, that the land of shades is the basin of a river divided by a mountain ridge from that from which the ghost departs.

The Punans add some picturesque incidents. According to their version, a huge helmeted hornbill[120] (RHINOFLAX VIGIL) sits by the far end of the bridge across the river of death, and with its screams tries to terrify the ghost, so that it shall fall from the bridge into the jaws of the great fish which is in league with the bird. On the other side of the river IS UNGAP, a woman with a cauldron and spear. UNGAP, if appeased with a gift, aids the ghost to escape from the monstrous bird and fish. Pebbles or beads are put in the nostrils of the Punan corpse in order that they may be presented to UNGAP.

The Punans recite or sing a story in blank verse descriptive of this passage of the soul. It is sometimes sung in very dramatic fashion, the performer acting the principal incidents and pitching his voice in a doleful, though musical, minor key. Such a recitation of the passage of the soul, delivered by a wild and tragic figure before an intently listening group of squatting men and women illuminated by flickering torchlight, is by no means unimpressive to the European observer. The following lines are a rough literal translation of a fragment of the story which describes the meeting with UNGAP of BATANG MIJONG, a departed soul: —

UNGAP SPEAKS —

BATANG MIJONG stands waving his shield.

The helmsman SARAMIN with body of brass will carry over BATANG MIJONG.

BATANG MIJONG seeks the place of the Punans.

Good journey to you, BATANG MIJONG.

BATANG MIJONG, O, why are you called?

BATANG MIJONG SPEAKS: —

Why do you question me, why do you stare at me?

UNGAP ANSWERS —

Your limbs are shapely, smooth is your skin and slender your body.

My eyes are dazzled by your bodily perfections.

Some of the Malanaus, one of the many branches of the Klemantan people, hold peculiar views about the soul. Each man is credited with two souls. After his death one of these goes to some region in the heavens where it becomes a good spirit that assists at the BAYOH ceremonies.[121] The other makes a journey to a world of the dead much like APO LEGGAN of the Kayans; and the journey involves the crossing of the river on a single log, the passage of which is disputed by a malign being, who tries to shake the nerve of the ghost by flinging ashes at him as he traverses the bridge. Other Malanaus (of Muka) describe this opposing power as a twoheaded dog, MAIWIANG by name, whom it is necessary to propitiate with the gift of a valuable bead. For this reason a bead of some value is fastened to the right arm of the corpse before the coffin is closed. It is said of the Malanaus that they were formerly in the habit of killing several slaves at the tomb of a chief; and, since it was believed that, if the victims died a violent death, their souls would not go to the same place as the dead chief, and would thus be of no service, they were allowed to die from exposure to the sun while bound to the tomb. Now that homicide is prohibited, these people arrange a great cock-fight; and there can be little doubt that the death of many of the birds is felt to compensate in some degree for the enforced abstention from homicide.

The last case on record of the killing of a slave at the entombment of a chief occurred about fifteen years ago among the Orang Bukits (Klemantans) in Bruni territory. The son of the dead chief (Datu Gunong) went to Bruni city, and there bought an aged slave from one of the principal officers of state. The slave was kept in a bamboo cage until the day of entombment, when he was killed, each of the funeral guests inflicting a small wound with a spear. His head was hung on the tomb. From circumstantial accounts of this incident which reached one of us, we infer that those who took part in this brutal act were moved only by a sense of duty and that the co-operation was repugnant to all of them.[122]

Exorcism

The Kayans, as well as most of the peoples, regard madness as due to possession by an evil spirit,[123] but the

Malanaus extend this theory to many other forms of disease, and practise an elaborate rite of exorcism. This will be described in the chapter (XVI.) dealing with charms and magical practices.

It will be gathered from what has been said in the foregoing pages that the life after death is regarded as not in any way very different from this life, as neither a very superior nor an inferior condition; although, as we have said, those who die a violent death are believed to have a rather better lot, and suicides a worse fate, than others. Social distinction and consideration, especially such as is achieved by the taking of heads in war, is carried over into the life after death; and men are anxious that outward marks of such distinction should go with them. This is undoubtedly one of the grounds for tatuing the body. Among the Kayans a man's hands are only fully tatued when he has taken a head; while the social status of a woman is marked by the degree of fineness of the tatuing.[124] It follows that death is neither greatly feared nor desired; but an old man will sometimes affirm that he is quite ready or even desirous to die, although he may seem cheerful and fairly vigorous.

The Kayans believe in the reincarnation of the soul, although this belief is not clearly harmonised with the belief in the life in another world. It is generally believed that the soul of a grandfather may pass into one of his grandchildren, and an old man will try to secure the passage of his soul to a favourite grandchild by holding it above his head from time to time. The grandfather usually gives up his name to his eldest grandson, and reassumes the original name of his childhood with the prefix or title LAKI, and the custom seems to be connected with this belief or hope. There is no means of discovering whether the hope is realised. The human soul may also, in the belief of all the peoples, be reincarnated in the body of almost any animal; but opinions in regard to this matter are very vague. Thus the Kayans believe that the objection of the Mohammedan Malays to the eating of pig is due to reincarnation of their souls in animals of that species, which belief naturally causes some vexation to the Malay traders.

Among the Kayans and other peoples sceptics are to be found, and, as no inquisitorial methods are in vogue among them, such persons will on occasion give expression to their doubts about the accepted dogmas, although speech about such topics is generally repressed by some touch of awe. One man, for example, argued in our hearing that he could hardly believe that man continues to exist after death, for, said he, if men and women still lived after death, some of those who have been very fond of their children would surely return to see them, and would be in some way perceived by the living. But all such discussions are usually terminated with the remark, "NUSI JAM?" ("Who knows?")

The Kenyahs' disposal of their dead is very similar in all respects to the Kayan practice. But the burial customs of most of the Klemantan tribes are different. Their usual practice is to keep the coffin containing the corpse in the gallery of the house until the period of mourning is terminated. A bamboo tube carried down through the floor to the ground permits the escape of fluids resulting from decomposition. The coffin itself is sealed closely with wax, and elaborately decorated with carved and painted wood-work. After several months or even years have elapsed a feast is made (the feast of the bones); the coffin is opened and the bones taken out and cleaned. They are then packed into a smaller coffin or a large ovoid jar, which is carried to the village cemetery. There it is placed either in the hollowed upper end of a massive post, or into a large wooden chamber containing, or to contain, the remains of several persons, generally near relatives. These tombs are in many cases very elaborately decorated with painted woodwork.

Since the Klemantans who use the jar to contain the bones are not capable of making such large jars, but procure jars of Indo-Chinese and Chinese manufacture, it seems probable that the jars are comparatively modern substitutes for the smaller wooden coffin or bone-box. Only the richer folk can afford the luxury of a jar.

A rather different procedure is sometimes adopted by the same Klemantans who use the wooden coffins, namely, the corpse is placed in a jar a few days after death. Since the mouth of the jar is generally too small to admit the corpse the jar is broken horizontally into two parts by the following ingenious procedure. The jar is sunk in the water of the river until it is full of water and wholly submerged; it is held horizontally by two men, one at either end, just beneath the surface of the water. A third man strikes a sharp downward blow with an axe upon the widest circumference of the jar; it is then turned over and he strikes a second blow upon the same circumference at a spot opposite to the first. At the second stroke the jar falls in two, sometimes as cleanly and nicely broken as though cut with a saw.[125] The corpse is then packed in with its knees tied closely under the chin; the upper part of the jar is replaced and sealed on with wax. When the time of the feast of the bones arrives, the jar is reopened, the bones cleaned, and replaced in the jar.

## Pagan Tribes of Borneo, V1

This mode of jar burial is commonly practised by the Muruts, and is commoner in the northern parts of the island than elsewhere. It may be added that the jars used are generally valuable old jars, and that the cheap modern copies of them find little favour.

The Klemantans put selected pieces of the property of the deceased within the tomb, but do not generally hang them on it externally as the Kayans and Kenyahs do.

The Sea Dayaks bury their dead in the earth, generally in a village graveyard on the river banks not far from the house. The body, together with personal property, is merely wrapped in mats and laid in a grave some three feet in depth. It is not usual to keep it in the house for some days as the Kayans do, and the burial is effected with comparatively little ceremony. The grave of the common man is not marked with any monument, but that of a chief may be marked by a SUNGKUP; this consists of two pairs of stout posts, at head and feet respectively; each pair is erected in the form of an oblique cross; the upper end of each post is carved in decorative fashion. Two broad planks laid between the lower parts of these crossed posts form a roof to the grave. In the case of a man noted for great success in farming or fighting, a bamboo tube may be sunk through the earth to the spot just above the root of the nose, and through this they speak to him and pour rice spirit in order to strengthen their appeal.

The Land Dayaks of upper Sarawak, as well as some other Klemantan tribes in South Borneo, are peculiar in that they burn the dead, or the bones alone after the flesh has dropped away. The burning of the whole body is in some tribes carried out by the richer families only; the bodies that are not burned are buried in the earth.

## CHAPTER 15. Animistic Beliefs Connected with Animals and Plants[126]

Many of the animals, both wild and domesticated, are held by the Kenyahs in peculiar regard; those that most influence their conduct are the omen-birds, and among the omen-birds the common white-headed carrion-hawk (HALIASTER INTERMEDIUS) is by far the most important. The Kenyahs always observe the movements of this hawk with keen interest, for by a well-established code of rules they interpret his movements in the heavens as signs by which they must be guided in many matters of moment, especially in the conduct of warlike or any other dangerous expeditions.[127] The hawk is always spoken of and addressed as BALI FLAKI, and is formally consulted before any party of Kenyahs sets out from home for distant parts.

To illustrate the formalities with which they read the omens we will transcribe here a passage from a journal kept by one of us. The occasion of the incidents described was the setting out of a large body of Kenyahs from the house of Tama Bulan (Pl. 27), a chief who by his personal merits had attained to a position of great influence among the other Kenyah chiefs, and who had been confirmed in his authority by His Highness the Rajah of Sarawak. The object of the expedition was to visit and make peace with another great fighting tribe, the Madangs, who live in the remotest interior of Borneo.[128] Tama Bulan, whose belief in the value of the omens had been slightly shaken, was willing to start without ceremonies, and to make those powers which he believed to protect us responsible for himself and his people also. But the people had begged him not to neglect the traditional rites, and he had yielded to their wishes.

At break of day, before I was up, Tama Bulan was washed by the women at the river's brink with water and the blood of pigs to purify him for his journey, and later in the morning the people set to work to seek omens and a guarantee of their safety on the journey from the hawks that are so numerous here. A small shelter of sticks and leaves was made on the river-bank before the house, and the women having been sent to their rooms, three men of the upper class[129] sat under this leaf-shelter beside a small fire, and searched the sky for hawks. After sitting there silently for about an hour the three men suddenly became animated; one of them took in his right hand a small chick and a stick frayed by many deep cuts with a knife, and waved them repeatedly from left to right, at the same time pouring out a rapid flood of words. They had caught sight of a hawk high up and far away from them, and they were trying to persuade it to fly towards the right. Presently the hawk, a tiny speck in the sky, sailed slowly out of sight behind a hill on the right, and the men settled themselves to watch for a second hawk which must fly towards the left, and a third which must circle round and round. In the course of about half-an-hour two hawks had obligingly put in an appearance, and behaved just as it was hoped and desired that they should behave; and so this part of the business was finished, and about a score of men bustled about preparing for the next act. They brought many fowls and several young pigs, and a bundle of long poles pointed at either end. Before the house stand upright two great boles of timber; the upper end of each of them is carved into a rude face and crowned with a brass gong (Pl. 157). These are two images of the one Supreme Being, Bali Penyalong, and they seem to be at the same time the altars of the god. A tall young tree, stripped of all but its topmost twigs, stands beside one of them, and is supposed to reach to heaven or, at least, by its greater proximity to the regions above, to facilitate intercourse. As to the meaning of this and many other features of these rites it is impossible to form any exact idea, for the opinions of these people in such matters are hardly less vague and diversified than those of more civilized worshippers. Tama Bulan, in his character of high priest,[130] took his stand before one of these images, while a nephew, one of the three men who had watched the hawks, officiated before the other and went through exactly the same ceremonies as his uncle, at the same time with him. Tama Bulan held a small bamboo water-vessel in his left hand, and with a frayed stick in his right hand sprinkled some of the water on the image, all the time looking up into its face and rapidly repeating a set form of words. Presently he took a fowl, snipped off its head and sprinkled its blood upon the image, and so again with another and another fowl. Then he held a young pig while a follower gashed its throat, and as the blood leapt out he scattered it on the image, while the score of men standing round about put their hands, some on him, some on one another; maintaining in this way physical contact with one another and with their leader, they joined in the prayer or incantation which he kept



pouring forth in the same rapid mechanical fashion in which many a curate at home reads the Church service. In the house, meanwhile, four boys were pounding at two big drums to keep away from the worshippers all sounds but the words of their own prayers.[131] Then another fowl and another pig were sacrificed in similar fashion at each altar, and the second part of the rite was finished by the men sticking the carcasses of the slaughtered beasts each one on the point of a pole, and fixing the poles upright in the earth before the images.

Tama Bulan now came up into the house to perform the third and last act. A pig was brought and laid bound upon the floor, and Tama Bulan, stooping, with a sword in his right hand, kept punching the pig gently behind the shoulder as though to keep its attention, and addressed it with a rapid flow of words, each phrase beginning "O Bali Bouin." The pig's throat was then cut by an attendant, and Tama Bulan, standing up, diluted its blood with water and scattered it abroad over all of us as we stood round about him, while he still kept up the rapid patter of words. Then he pulled off the head of a fowl and concluded the rites by once more sprinkling us all with blood and water. Everyone seemed relieved and well satisfied to have got through this important business, and to have secured protectors for all the party during the forthcoming journey. For the three hawks will watch over them, and are held to have given them explicit guarantees of safety. The frayed stick that had figured so largely in the rites was stuck under the rafters of the roof among a row of others previously used, and there it will remain, a sign and a pledge of the piety of the people, as long as the house shall stand. And then as Tama Bulan, pretty well covered with blood, went away to wash himself, I felt as though I had just lived through a book of the AENEID, and was about to follow Father Aeneas to the shores of Latium.

This elaborate rite, so well fitted to set agoing the speculative fancy of any one acquainted with the writings of Robertson Smith and Messrs. Jevons and Frazer, was one of the first that we witnessed together. After giving all our facts we shall return to discuss some of the interesting questions raised by it, but it will be seen that we are far from having discovered satisfactory explanations of all its features. Obscure features to which we would direct attention are the use of the fire and the frayed stick, for these figure in almost all rites in which the omen-birds are consulted or prayers and sacrifices made. The Kenyahs seem to feel that the purpose of fire is to carry up the prayers to heaven by means of the ascending flame and smoke, in somewhat the same way as the tall pole planted by the side of the image of Bali Penyalong facilitates communion with the spirit; for they conceive him as dwelling somewhere above the earth.

Before going out to attack an enemy, omens are always sought in the way we have described, and if the expedition is successful the warriors bring home not only the heads of the slain enemy, but also pieces of their flesh, which they fix upon poles before the house, one for each family, as a thank-offering to Bali Flaki for his guidance and protection. It seldom occurs that a hawk actually takes or eats these pieces of flesh, and that does not seem to be expected. Without favourable omens from the hawks Kenyahs will not set out on any expedition, and even when they have secured them, they still anxiously look out for further guidance, and may be stopped or turned back at any time by unfavourable omens. Thus, should a hawk fly over their boat going in the same direction as themselves, this is a good omen; but if one should fly towards them as they travel, and especially if it should scream as it does so, this is a terribly bad omen, and only in case they can obtain other very favourable omens to counteract the impression made by it will they continue their journey. If one of a party dies on the journey, they will stop for one whole day for fear of offending Bali Flaki. If a hawk should scream just as they are about to deliver an attack, that means that some of the elder men will be killed in the battle.

Bali Flaki is also consulted before sowing and harvesting the rice crop, but besides being appealed to publicly on behalf of the whole community, his aid may be sought privately by any man who wishes to injure another. For this purpose a man makes a rough wooden image in human form, and retires to some quiet spot on the river bank where he sets up a TEGULUN, a horizontal pole supported about a yard above the ground by a pair of vertical poles. He lights a small fire beside the TEGULUN, and, taking a fowl in one hand, he sits on the ground behind it so as to see through it a square patch of sky.[132] and so waits until a hawk becomes visible upon this patch. As soon as a hawk appears he kills the fowl, and with a frayed stick smears its blood on the wooden image, saying, "Put fat in his mouth" (which means "Let his head be taken and fed with fat in the usual way"), and he puts a bit of fat in the mouth of the image. Then he strikes at the breast of the image with a small wooden spear, and throws it into a pool of water reddened with red earth, and then takes it out and buries it in the ground. While the hawk is visible, he waves it towards the left; for he knows that if it flies to the left he will prevail over his enemy, but that if it goes to the right his enemy is too strong for him.

When a new house is built, a wooden image of Bali Flaki with wings extended is put up before it, and an offering of mixed food is put on a little shelf before the image, and at times, especially after getting good omens from the hawks, it is offered bits of flesh and is smeared with pig's blood. If the people have good luck in their new house, they renew the image; but if not, they usually allow it to fall into decay. If, when a man is sitting down to a meal, he espies a hawk in the heavens, he will throw a morsel of food towards it, exclaiming, "Bali Flaki!"

We have seen that during the formal consultation of the hawks the women are sent to their rooms. Nevertheless many women keep in the cupboards in which they sleep a wooden image of the hawk with a few feathers stuck upon it. If the woman falls sick she will take one of these feathers and, waving it to and fro, will say, "Tell the bad spirit that is making me sick that I have a feather of Bali Flaki." When she recovers her health Bali Flaki has the credit of it.

Although Kenyahs will not kill a hawk, they would—not prevent us from shooting one if it stole their chickens; for they say that a hawk who will do that is a low—class fellow, a cad, in fact, for there are social grades among the hawks just as there are among themselves.

Although the Kenyahs thus look to Bali Flaki to guide them and help them in many ways, and express gratitude towards him, we do not think that they conceive of him as a single great spirit, as some of the other tribes tend to do; they rather look upon the hawks as messengers and intermediators between themselves and Bali Penyalong,[133] to which a certain undefined amount of power is delegated. No doubt it is a vulgar error with them, as in the case of professors of other forms of belief, to forget in some degree the Supreme Being, and to direct their prayers and thanks almost exclusively to the subordinate power, which, having concrete forms, they can more easily keep before their minds. They regard favourable omens as given for their encouragement, and bad omens as friendly warnings.[134] We were told by one very intelligent Kenyah that he supposed that the hawks, having been so frequently sent by Bali Penyalong to give them warnings, had learnt how to do this of their own will, and that sometimes they probably do give them warning or encouragement independently without being sent by him.

All Kenyahs hold Bali Flaki in the same peculiar regard, and no individuals or sections of them claim to be especially favoured by him or claim to be related to him by blood or descent.

#### Other Omen—birds

Kenyahs obtain omens of less importance from several other birds. When favourable omens have been given by the hawks, some prominent man is always sent out to sit on the river—bank beside a small fire and watch and listen for these other birds. Their movements and cries are the signs which he interprets as omens, confirming or weakening the import of those given by the hawks. Of these other omens the most regarded are those given by the three species of the spider—hunter (ARACHNOTHERA CHRYSOGENYS, A. MODESTA, and A. LONGIROSTRIS). All three species are known as "Sit" or "Isit." When travelling on the river, the Kenyahs hope to see "Isit" fly across from left to right as they sit facing the bow of the canoe. When this happens they call out loudly, saying, "O, Isit on the left hand! Give us long life, help us in our undertaking, help us to find what we are seeking, make our enemies feeble." They usually stop their canoes, land on the bank, and, after making a small fire, say to it, "Tell Isit to help us." Each man of the party will light a cigarette in order that he may have his own small fire, and will murmur some part at least of the usual formulas. After seeing "Isit" on their left, they like to see him again on their right side.

Next in importance to the spider—hunters are the three varieties of the trogan (HARPACTES DIARDI, H. DUVAUCELII, and H. KASUMBA). They like to hear the trogan calling quietly while he sits on a tree to their left; but if he is on their right, the omen is only a little less favourable.[135] On hearing the trogan's cry, they own it, as they say, by shouting to it and by stopping to light a fire just as in the case of "Isit."

KIENG, the woodpecker (LEPOCESTES PORPHYROMELAS), has two notes, one of which is of good, the other of bad omen. If they have secured good omens from the birds already mentioned, they will then try to avoid hearing KIENG, lest he should utter the note of evil omen; so they sing and talk and rattle their paddles on the sides of the boat.

Other omen—birds of less importance are ASI (CARCINEUTES MELANOPS), whose note warns them of difficulties in their path, and UKANG (SASIA ABNORMIS), whose note means good luck for them. TELAJAN, the crested rain—bird (PLATYLOPHUS CORONATUS), announces good luck by its call and warns of serious difficulties also.

KONG, the hornbill (*ANORRHINUS COMATUS*), gives omens of minor importance by his strange deep cry. The handsome feathers of another species of hornbill (*BUCEROS RHINOCEROS*), with bold bars of black and white, are worn on war-coats and stuck in the war-caps by men who are tried warriors, but may not be worn by mere youths. The substance of the beak of the helmeted hornbill (*RHINOFLAX VIGIL*) is sometimes carved into the form of the canine tooth of the tiger-cat, and a pair of these is the most valued kind of ear-ornament for men. Only elderly men, or men who have taken heads with their own hands, may wear them. One of the popular dances consists in a comical imitation of the movements of the hornbill, but no special significance attaches to the dance; it seems to be done purely in a spirit of fun. Young hornbills are occasionally kept in the house as pets.

We know of no other bird that plays any part in the religious life of the Kenyahs or affects them in any peculiar manner.

#### The Pig

All Kenyahs keep numerous domestic pigs, which roam beneath and about the house, picking up what garbage they can find to eke out the scanty meals of rice-dust and chaff given them by the women. It seems that they seldom or never take to the jungle and become feral, although they are not confined in any way.

The domestic pig is not treated with any show of reverence, but rather with the greatest contumely, and yet it plays a part in almost all religious ceremonies, and before it is slaughtered explanations are always offered to it, and it is assured that it is not to be eaten. We have seen that, in the rites preparatory to an important and dangerous expedition, the chief was washed with pig's blood and water, and that young pigs were slain before the altar-post of Bali Penyalong, and their blood sprinkled on the post and afterwards upon all or most of the men of the household. It is probably true that Bali Penyalong is never addressed without the slaughter of one or more pigs, and also that no domestic pig is ever slaughtered without being charged beforehand with some message or prayer to Bali Penyalong, which its spirit may carry up to him. But the most important function of the pig is the giving of information as to the future course of events by means of the markings on its liver.[136]

Whenever it becomes specially interesting or important to ascertain the future course of events, when, for example, a household proposes to make war, or when two parties are about to go through a peace-making ceremony, a pig is caught by the young men from among those beneath the house, and is brought and laid, with its feet lashed together, before the chief in the great gallery of the house. And it would seem that the more important the ceremony the larger and the more numerous should be the pigs selected as victims. An attendant hands a burning brand to the chief, and he, stooping over the pig, singes a few of its hairs, and then, addressing the pig as "Bali Bouin," and gently punching it behind the shoulder, as we have already depicted him, he pours out a rapid flood of words. The substance of his address is a prayer to Bali Penyalong for guidance and knowledge as to the future course of the business in hand, and an injunction to the soul of the pig to carry the prayer to Bali Penyalong.

Sometimes more than one chief will address one pig in this way; and then, as soon as these prayers are concluded, some follower plunges a spear into the heart or throat of the pig, and rapidly opens its belly in the middle line, drags out the liver and lays it on a leaf or platter with the underside uppermost, and so carries it to the chief or chiefs. Then all the elderly men crowd round and consult as to the significance of the appearances presented by the underside of the liver. The various lobes and lobules are taken to represent the various districts concerned in the question on which light is desired, and according to the strength and intimacy of the connections between these lobes, the people of the districts represented are held to be bound in more or less lasting friendship. While spots and nodules in any part betoken future evils for the people of that part, a clean healthy liver means good fortune and happiness for all concerned.

The underside of the liver, which alone is significant, varies considerably from one specimen to another, and this must prevent any very definite and consistent identification of the parts with the different districts of the country. The rule generally observed is to identify the under surface of the right lobe (*ARTI TOH*) with the territory of the party that kills the pig and makes the enquiry; the adjacent part of the left lobe (*SUNAN*) with the territory of any party involved in the question which adjoins that of the first party; and the under surface of the caudal extremity (*ARTI ARKAT*) with that of any remoter third party (see Fig. 79). If the ridge that runs up between the right and left lobes is sharp, it indicates that there will still be some bad feeling (or, as they say, the swords are still sharp). A gall-bladder which is long and overlapping indicates more trouble between the parties to the right and left; but one which is sunk almost out of sight in the substance of the liver is a sign that no further

trouble is to be expected. The grooves on the under surface of the right lobe stand for the waterways and, if they are strongly marked, imply freedom of intercourse. Notches at the free edges stand for past injuries suffered (the scars of wounds received, as it were); and if these are equally marked in the several parts they indicate peace, because it is implied that no balance of old scores remains to any one of the parties concerned. A sore or abscess in any part foretells the speedy death of one of the chiefs of the people of that part.

FIGURE 79

It is obvious that this system of interpretation, which is common to nearly all the peoples, gives much scope for the operation of prejudice, suggestion, and ingenuity. But the group of interpreting chiefs and elder men generally achieves unanimity in giving its verdict.

The omens thus obtained are held to be the answer vouchsafed by Bali Penyalong to the prayers which have been carried to him by the spirit of the pig.

If the answer obtained in this way from one pig is unsatisfactory, they will often kill a second, and on important occasions even a third or fourth, in order to obtain a favourable answer. Unless they can thus obtain a satisfactory forecast, they will not set out upon any undertaking of importance.

After any ceremony of this kind the body of the pig is usually divided among the people, and by them cooked and eaten without further ceremony. But we have seen that, after the ceremony in preparation for an expedition, the bodies of the young pigs whose blood was scattered on the altarpost of Bali Penyalong were fixed upon tall poles beside this altar-post and there left; and this seems to be the rule in ceremonies of this sort, though it is not clear whether the carcasses are left there as offerings to the hawks or to Bali Penyalong, or because they are in some sense too holy to be used as food after being used in such rites.

Probably Kenyahs never give to the spirits in this way the whole body of a large pig, but only of quite small pigs, and in this they are probably influenced by considerations of economy.

It may be said generally that Kenyahs do not kill domestic pigs simply and solely for the sake of food. The killing of a pig is always the occasion for, or occasioned by, some religious rite. It is true that on the arrival of honoured guests a pig is usually killed and given to them for food; but its spirit is then always charged with some message to Bali Penyalong. It is said that, when the pig's spirit comes to Bali Penyalong, he is offended if it brings no message from those who killed the pig, and he sends it back to carry off their souls.

On many other occasions also pigs are killed; thus, on returning from a successful attack on enemies, a pig is usually killed for each family of the household, and a piece of its flesh is put up on a pole before the house; and during the severe illness of any person of high social standing, pigs are usually killed, and friendly chiefs may come from distant parts, bringing with them pigs and fowls that they may sacrifice them, and so aid in restoring the sick man to health. On the death of a chief, too, a great feast is made, and many pigs are slaughtered, and their jaw-bones are hung up on the tomb. A pig is sometimes used in the ceremony by which a newly-made peace is sealed between tribes hitherto at blood-feuds, but a fowl is more commonly used.

The wild pig which abounds in the forest is hunted by the Kenyahs, and when brought to bay by the dogs is killed with spears, and it is eaten without ceremony or compunction by all classes. The wild pig is never used as messenger to the gods, and its liver is not consulted. The lower jaws of all wild pigs that are killed are cleaned and hung up together in the house, and it is believed that if these should be lost or in any way destroyed the dogs would cease to hunt.

The domestic fowls are seldom killed for food, and their eggs too can hardly be reckoned as a regular article of diet, though the people have no prejudice against eating them. And it would seem that the fowls are kept in the main for ceremonial purposes, and that their table use is of very secondary importance.

Fowls are killed on many of the occasions on which pigs are sacrificed, and, as we have seen in the description of the ceremony at Tama Bulan's house, their blood may be poured upon the altarposts of Bali Penyalong. It would seem that fowls and pigs are to some extent interchangeable equivalents for sacrificial purposes. Perhaps the most important occasion on which the fowl plays a part is the performance of the rite by which a blood-feud is finally wiped away. The following extract from the journal previously quoted describes an incident of this kind: --

In the evening there was serious business on hand. Two chiefs, who some years ago were burned out of their homes in the Rejang district by the government, have settled themselves with their people in the Baram district. They had made a provisional peace with the Kayans some years ago, but the final ceremony was to be performed

this evening. The two chiefs of the immigrants, who had remained hitherto in a remote part of the house, seated themselves at one side, and the Kayan chiefs at the other, and Tama Bulan and ourselves between the two parties. First, presents of iron were exchanged. In the old days costly presents of metal-work used to be given; but, as this led sometimes to renewed disputes, the government has forbidden the giving, in such ceremony, of presents of a greater value than two dollars. So now old sword-blades are given, and the other essential part of the present has been proportionately reduced from a full-grown fowl to a tiny chick. After much preliminary talking, two chicks were brought and a bundle of old sword-blades, which Tama Bulan, in his character of peace-maker, carries with him whenever he travels abroad. A chief of either party took a chick and a sword and presented them to the other. Then one led his men a little apart and began to rattle off an invocation beginning, "O sacred (Bali) chick," snipped off its head with the sword, and with the bloody blade smeared the right arm of his followers as they crowded round him. The old fellow kept up the stream of words until every man was smeared; and then they all stamped together on the floor raising a great shout. Then the other party went through a similar performance; and the peace being thus formally ratified, we sat down to cement it still further by a friendly drinking bout.

Another ceremony in which the fowl plays a prominent part is that by which the wandering soul of a sick person is found and led back to his body by the medicine-man. This is described in Chapter XIV.

It seems clear that the fowl, like the pig, is used on these occasions as a messenger sent by man to the Supreme Spirit. In most cases when a fowl is slaughtered in the course of a ceremony, it is first waved over the heads of the people taking part in it, and its blood is afterwards sprinkled upon them.

In the blood-brotherhood ceremony, when each of the two men drinks or smokes in a cigarette a drop of the other's blood drawn with a bambooknife, a fowl is in many cases waved over them and then killed, and occasionally a pig also is killed. In such a case the man who has killed the fowl will carry its carcass to the door of the house, and there he will wave towards the heavens a frayed stick moistened with its blood, while he announces the facts of the ceremony to Bali Penyalong. So that here again the fowl seems to play the part of a messenger. The carcass and the bloody stick are afterwards put up together on a tall pole before the house. After going through this ceremony a man is safe from all the members of the household to which his blood-brother belongs; and in the case of two chiefs all the members of either household are bound to those of the other by a sacred tie.

Fowls' eggs are sometimes put on the cleft poles as sacrifices. In one instance, when we were engaged in fishing a lake with a large party in boats, we came upon a row of eight poles stuck upright at the edge of the lake, each holding a fowl's egg in its cleft upper end. These had just been put there by the crew of one of the canoes as an offering to the crocodiles, which were regarded as the most influential of the powers of the lake and able to ensure us good sport.

In such cases the eggs are probably economical substitutes for fowls, as seems to be indicated by the following facts: When Kenyah boys enter a strange branch of the river for the first time, they go, each one taking a fowl's egg in his hand, into the jungle with some old man, who takes the eggs, puts them into the cleft ends of poles fixed upright in the earth, and thus addresses all the omen-birds collectively, "Don't let any harm happen to these children who are coming for the first time to this river; they give you these eggs." Sometimes instead of eggs the feathers of a fowl are used; and both the eggs and feathers would seem to be substituted for fowls, as being good enough in the case of mere children performing a minor rite.

When the belly of a fowl is opened there are prominent two curved portions of the gut. The state of these is examined in some cases before the planting of PADI, and sometimes before attempting to catch the soul of a sick man. If the parts are much curved, it is a good omen; if straight or but slightly curved, it is a bad omen.

#### The Crocodile

Like all other races of Sarawak, the Kenyahs regard the crocodiles that infest their rivers as more or less friendly creatures. They fear the crocodile and do not like to mention it by name, especially if one be in sight, and refer to it as "old grandfather." But the fear is rather a superstitious fear than the fear of being seized by the beast. They regard those of their own neighbourhood as more especially friendly, in spite of the fact that members of their households are occasionally taken by crocodiles, either while standing incautiously on the bank of the river or while floating quietly at evening time in a small canoe. When this happens, it is believed either that the person taken has in some way offended or injured one or all of the crocodiles, or that he has been taken by a stranger crocodile that has come from a distant part of the river, and therefore did not share in the friendly understanding

usually subsisting between the people and the local crocodiles. But in any case it is considered that the crocodiles have committed an unjustifiable aggression and have set up a blood-feud which can only be abolished by the slaying of one or more of the aggressors. Now it is the habit of the crocodile to hold the body of his victim for several days before devouring it, and to drag it for this purpose into some muddy creek opening into the main river. A party is therefore organised to search all the neighbouring creeks, and the first measure taken is to prevent the guilty crocodile escaping to some other part of the river. To achieve this they take long poles, frayed with many cuts, and set them up on the river-bank at some distance above and below the scene of the crime and at the mouths of all the neighbouring creeks and streamlets; and they kill fowls and pray that the guilty crocodile may be prevented from passing the spots thus marked. They then search the creeks, and if they find the criminal with the body of his victim they kill him, and the feud is at an end. But, if they fail to find him thus, they go out on the part of the river included between their charmed poles, and, with their spears tied to long poles, prod all the bed of this part of the river, and thus generally succeed in killing one or more crocodiles. They then usually search its entrails for the bones and hair of the victim so as to make sure that they have caught the offending beast. But, even if they do not obtain conclusive evidence of this kind, they seem to feel that justice is satisfied, and that the beast killed is probably the guilty one.

Except in the meting out of a just vengeance in this way, no Kenyah will kill a crocodile, and they will not eat its flesh under any circumstances. But there is no evidence to show that they regard themselves as related by blood or descent to the crocodiles or that their ancestors ever did so.

When Kenyahs go on a journey into strange rivers or to the lower part of the main river, they fear the crocodiles of these strange waters, because they are unknown to them, and any one of them might easily be mistaken by the crocodiles for some one who has done them an injury. Some Kenyahs tie the red leaves of the DRACAENA below the prow of their boat whenever they go far from home, believing that this protects them from all danger of attack by crocodiles.

#### The Dog

In all Kenyah houses are large numbers of dogs, which vary a good deal in size and colour, but roughly resemble large, mongrel-bred, smooth-haired terriers. Each family owns several, and they are fed with rice usually in the evening; but they seem to be always hungry. The best of them are used for hunting; but besides these there is always a number of quite useless, ill-fed, ill-tempered curs; for no Kenyah dare kill a dog, however much he may wish to be rid of it. Still less, of course, will he eat the flesh of a dog. The dogs prowl about, in and around the house, much as they please, but are not treated with any particular respect. When a dog intrudes where he is not wanted it is usual to click with the tongue at him, and this is usually enough to make him pass on; but blows with a stick follow quickly if the animal does not obey. They display little affection for their dogs, and they do not like children to touch or play with the dogs, but of course cannot altogether prevent them.

One young Kenyah chief, on being questioned, said that the reason they will not kill dogs is that they are like children, and eat and sleep together with men in the same house; and he added that, if a man should kill a dog, he would go mad.

If a dog dies in the house, the men push the carcase out of the house and into the river with long poles, and will on no account touch it with their hands. The spot on the floor on which the dog died is fenced round with mats for some few days in order to prevent the children walking over it.

It is usual for the Kenyah men to have one or more designs tattooed on their forearms and shoulders. Among the commonest of these designs are those known as the prawn and the dog (see Chap. XII). They seem to be conventionalised derivatives from these animal forms. It is said that the dog's head design was formerly much more in fashion than it is at the present time.

#### Deer and Cattle

Very few Kenyahs of the upper class will kill or eat deer and wild cattle. They believe that if they should eat their flesh they would vomit violently and spit out blood. They have no domestic cattle, and the buffalo does not occur in their districts. Lower-class Kenyahs and slaves, taken as war-captives from other tribes, may eat deer and horned cattle, but they must take the flesh some little distance from the house when they cook it. A woman who is pregnant, or for any other reason is in the hands of a physician, has to observe the restrictions with regard to deer and cattle more strictly than other people, and she will not touch or allow to be brought near her any article of leather or horn.

The war-coats of the men are often made of the skin of goats or deer, and any man may wear such a war-coat. But when a man has a young son, he is particularly careful to avoid contact with any part of a deer, lest through such contact he should transmit to his son in any degree the timidity of the deer. On one occasion when we had killed a deer, a Kenyah chief resolutely refused to allow its skin to be carried in his boat, alleging the above reason.

The cry or bark of the deer (*CERVULUS MUNTJAC*) is a warning of danger, and the seeing or hearing of the mouse-deer or *PLANDOK* (*TRAGULAS NAPU*) has a like significance.

#### The Tiger-cat

The only large species of the *FELIDAE* that occurs in Borneo is the tiger-cat (*FELIS NEBULOSA*). Kenyahs will not eat it, as men of some tribes do, but will kill it; and they fashion its handsome spotted skin into war-coats. Such coats are worn only by men who have been on the war-path. The canine teeth of the tiger-cat are much prized as ornaments; they are worn thrust through holes in the upper part of the shell of the ear, but only by full-grown men. *KULEH*, the name of this beast, is sometimes given to a boy.

The true tiger does not now occur in Borneo, and it is doubtful whether it ever was a native of the island. Nevertheless the Kenyahs know it by name (*LINJAU*) and by reputation, and a few skins are in the possession of chiefs. No ordinary man, but only a distinguished and elderly chief, will venture to wear such a skin as a war-coat, or even to touch it. These skins have been brought from other lands by Malay traders, and it is probable that whatever knowledge of the tiger the Kenyahs possess has come from the same source.

A chief will sometimes name his son *LINJAU*, that is, the Tiger.

#### Other Animals

A carnivore (*ARCTOGALE LEUCOTIS*) allied to the civet-cat warns of danger when seen or heard.

There is a certain large lizard (*VARANUS*) that is eaten freely by other tribes, but Kenyahs may not eat it, though they will kill it.

They regard the seeing of any snake as an unfavourable omen, and will not kill any snake gratuitously.

Kenyahs, like all, or almost all the other natives of Borneo, are more or less afraid of the *Maias* (the orang-utan) and of the long-nosed monkey, and they will not look one in the face or laugh at one.

In one Kenyah house a fantastic figure of the gibbon is carved on the ends of all the main crossbeams of the house, and the chief said that this has been their custom for many generations. He told us that it is the custom, when these beams are being put up, to kill a pig and divide its flesh among the men who are working, and no woman is allowed to come into the house until this has been done. None of his people will kill a gibbon, though other Kenyahs will kill and probably eat it. They claim that he helps them as a friend, and the carvings on the beams seem to symbolize his supporting of the house.

In other parts of the same house are carvings of the *bangat*, *SEMNOPITHECUS HOSEI*, but the old chief regards these as much less important and as recent innovations.

We do not know of any other animals to which especial respect or attention is paid by the Kenyahs.

#### Animal Cults of the Kayans

The white-headed hawk (*Bali Flaki*) of the Kenyahs has its equivalent among the Kayans in the large dark-brown hawk, which they call *Laki Neho*. But as it is not possible to distinguish these two kinds of hawks when seen flying at some distance, they address and accept all large hawks seen in the distance as *Laki Neho*.

The function and powers of *Laki Neho* seem to be almost identical with those of *Bali Flaki*. He is a giver of omens and a bringer of messages from *Laki Tenangan*. The following notes of a conversation with an intelligent Kayan chief will give some idea of his attitude towards *Laki Neho*. It must be remembered that these people have no priesthood and no dogmatic theologians to define and formulate beliefs, so that their ideas as to the nature of their gods and their abodes and powers are, though perhaps more concrete, at least as various in the minds of different individuals as are the corresponding ideas among the average adherents of more highly developed forms of religion; and perhaps no two men will agree exactly on these matters, and any one man will freely contradict his own statements.

*Laki Tenangan* is an old man with long white hair who speaks Kayan and has a wife, *Doh Tenangan*. They sometimes see him in dreams, and if fortunate they may then see his face,[137] but if unlucky they see his back only. In olden times powerful men sometimes spoke with him, but now this never occurs. He dwells in a house far away. *Laki Neho* also has a house that is covered with palm leaves and frayed sticks. It is in a tree-top, yet it is

beside a river, and has a landing-place before it like every Kayan house. This house is sometimes seen in dreams. It is not so far away as the house of Laki Tenangan. At first our informant said that help is asked directly of Laki Neho; but, when pressed, he said that Laki Neho may carry the message to Laki Tenangan. Some things Laki Neho does of his own will and power; for example, if a branch were likely to fall on a Kayan boat he would prevent it, for Laki Tenangan long ago taught him how to do such things. When a man is sick, Kayans appeal to Laki Neho; but if he does not make the patient well they then appeal to Laki Tenangan directly, killing a pig, whose spirit goes first to the house of Laki Neho, and then on to the more distant house of Laki Tenangan. For they believe that in such a case the patient has somehow offended Laki Neho by disregarding or misreading his omens. A man suffering from chronic disease may himself pray to Laki Tenangan. He lights a fire and kills a fowl, and perhaps a pig also, and calls upon Laki Neho to be his witness and messenger. He holds an egg in one hand and says, "This is for you to eat, carry my message direct to Laki Tenangan that I may get well and live and bring up my children, who shall be taught my occupations and the true customs." The fire is lighted to make Laki Neho warm and energetic.

It will be seen from the above account that the Kayans have formed a concept of the power of the hawks in general, and have given it a semi-anthropomorphic character, and we shall see below that the Sea Dayaks have carried this process still further.

#### Crocodiles

The Kayan's attitude towards the crocodile is practically the same as the Kenyah's. We append the following notes of a conversation with a young Kayan chief, Usong, and his cousin Wan: There are but very few Kayans who will kill a crocodile except in revenge. But if one of their people has been taken by a crocodile they go out together to kill the criminal, and they begin by saying, "Don't run away, you've got to be killed, why don't you come to the surface? You won't come out on the land because you have done wrong and are afraid." After this he will perhaps come on land; and if he does not, he will at least float to the surface of the water, and is then killed with spears. In olden days Kayans used to make a crocodile of clay and ask it to drive away evil spirits; but now this is not done. A crocodile may become a man just like themselves. Sometimes a man dreams that a crocodile calls him to become his blood-brother, and after they have gone through the regular ceremony and exchanged names (in the dream), the man is quite safe from crocodiles. Usong's uncle has in this way become blood-brother to a crocodile, and is now called "Baya" (the generic name for the crocodile), while some crocodile unknown is called Jok, and Usong considers himself the nephew of the crocodile Jok. Usong's father has also become blood-brother to a crocodile, and Usong calls himself a son of this particular unknown crocodile. Sometimes he asks these two, his uncle- and his father-crocodiles, to give him a pig when he is out hunting, and once they did give him one. After relating this, Usong added, "But who knows if this be true?"

Wan's great-great-grandfather became blood-brother to a crocodile, and was called "Klieng Baya." Wan has several times met this crocodile in dreams. In one dream he fell into the river when there were many crocodiles about. He climbed on to the head of one, which said to him, "Don't be afraid," and carried him to the bank. Wan's father had charms given him by a crocodile and would not on any account kill one, and Wan clearly regards himself as being intimately related to crocodiles in general.

The Kayans regard the pig and the fowl in much the same way as the Kenyahs do, and put them to the same uses. The beliefs and customs with regard to deer, horned cattle, dogs, and the tiger-cat, are similar to those of the Kenyahs save that they will not kill the last of these. They are perhaps more strict in the avoidance of deer and cattle. One old chief, who had been ailing for a long time, hesitated to enter the Resident's house because he saw a pair of horns hanging up there. When he entered he asked for a piece of iron, and on returning home he killed a fowl and a pig, and submitted to the process of having his soul caught by a DAYONG, lest it should have incurred some undefined injury in the neighbourhood of the horns.

The Kayans avoid the skin of the tiger even more strictly than the Kenyahs or any other tribe; even a great chief will not touch a tiger-skin, and we have known one refuse to enter a house because he knew that it contained a tiger-skin war-coat.

Like the Kenyahs, the Kayans entertain a superstitious dread of the Maias and the long-nosed monkey, but the DOK (MACACUS NEMESTRINUS), the coco-nut monkey of the Malay States, has special relations to them. It is very common in their district, but they will kill it only when it is stealing their rice-crop; and they will never



eat it as other peoples do. There is a somewhat uncertain belief that it is a blood-relative, and the following myth is told to account for this. A Kayan woman of high class was reaping PADI with her daughter. Now it is against custom to eat any of the rice during reaping; and when the mother went away for a short time leaving the girl at work, she told her on no account to eat any of the rice. But no sooner was the mother gone than the girl began to husk some PADI and nibble at it. Then at once her body began to itch, and hair began to grow on her arms like the hair of a DOK. Soon the mother returned and the girl said, "Why am I itching so?" The mother answered, "You have done some wicked thing, you have eaten some rice." Then hair grew all over the girl's body except her head and face, and the mother said, "Ah, this is what I feared, now you must go into the jungle and eat only what has been planted by human hands." So the girl went into the jungle and her head became like a DOK'S, and she ceased to be able to speak.

The DOK does not help them in any way, but only spoils their crops. A very popular dance is the DOK dance, in which a man imitates very cleverly the behaviour of the DOK. It is a very ludicrous performance, and excites boisterous mirth. They say it is done merely in fun.

In one Kayan house the ends of all the main crossbeams that support the roof are ornamented with fretwork designs, which are clearly animal derivatives and apparently all of the same animal. The form suggests a crocodile, and some of the men agreed that that was its meaning, while others asserted that it was a dog. No doubt it was originally one or other of these, but has now become a conventional design merely, and its true origin has been forgotten.

A pattern which seems to be derived from the outline of a dog, and which goes by the name KALANG ASU (= dog-pattern), occurs in a great variety of forms in the decorative art of the Kayans, and also, though to a less extent, in that of the Kenyahs. It is tattooed on arm and thigh, is reproduced in beadwork, and carved in low relief on decorative panels.[138]

Neither Kayans nor Kenyahs make much use of snakes of any kind, but there is one snake with red head and tail (BATANG LIMA) which, when they see it in the course of a journey, they must kill, else harm will befall them. Again, if they see a certain snake just as they are about to enter a strange river or a strange village, they will stop and light a fire on the bank in order to communicate with Laki Neho. Kayans will not eat any species of turtle or tortoise.

#### Klemantans

The following notes of a conversation with the Orang Kaya Tumonggong, the influential chief of the Long Pata people (one of the many groups of Klemantans), show that these people regard the hawk in much the same way as the Kenyahs do: The hawk, BALI FLAKI, is the messenger of "Bali Utong," the Supreme Being. When a party is about to set out on any expedition they explain their intentions to BALI FLAKI, and then observe the movements of the hawks. If a hawk circles round over their heads, some of the party will fall sick on the journey and probably will die. If the hawk flies to the right when near at hand, it is a good omen; but if it flies to the right when at a distance, or to the left, whether near or far, that is a bad omen. The people then light a fire and entreat the hawk to give a more favourable sign, and if it persists in going to the left they give up the expedition. If, while the omens are being read, the hawk flaps his wings, or screams, or swoops down and settles on a tree, the omen is bad. But if it swoops down and up again, that is good. If two or three hawks are visible at the same time, and especially if they all fly to the right, that is very good; but if many are visible, and especially if they fly off in different directions, that is very bad, for it means that the enemy will scatter the attacking force. If the hawk should capture a small bird while it is under observation, that means that they will be made captives if they persist in their undertaking. The hawk is not claimed as a relative by Klemantans. They take omens from various other birds in matters of minor importance.

Klemantans use the domestic pig and fowl as sacrificial animals just as the Kenyahs and Kayans do, and they have the same superstitious dread of killing a dog. One group of them, Malanaus, use a dog in taking a very solemn oath, and sometimes the dog is killed in the course of this ceremony. Or instead of the dog being killed, its tail may be cut off, and the man taking the oath licks the blood from the stump; this is considered a most binding and solemn form of oath. The ceremony is spoken of as KOMAN ASU, I.E. "the eating of the dog."

Most Klemantans will kill and eat both deer and cattle freely. But there are exceptions to this rule. Thus Damong, the chief of a Malanau household, together with all his people, will not kill or eat the deer CERVULUS MUNTJAC, alleging that an ancestor had become a deer of this kind, and that, since they cannot distinguish this

incarnation of his ancestor from other deer, they must abstain from killing all deer of this species. We know of one instance in which one of these people refused to use again his cooking-pot, because a Malay who had borrowed it had used it for cooking the flesh of deer of this species. This superstition is still rigidly adhered to, although these people have been converted to Islam of recent years.

On one occasion another chief resolutely refused to proceed on a journey through the jungle when a mouse-deer, PLANDOK, crossed his path; he will not eat this deer at any time.[139]

The people of Miri, who also are Mohammedan Malanaus, claim to be related to the large deer, CERVUS EQUINUS, and some of them to the muntjac deer also. Now, these people live in a country in which deer of all kinds abound, and they always make a clearing in the jungle around a tomb. On such a clearing grass grows up rapidly, and so the spot becomes attractive to deer as a grazing ground; and it seems not improbable that it is through frequently seeing deer about the tombs that the people have come to entertain the belief that their dead relatives become deer, or that they are in some other way closely related to the deer.

The Bakongs, another group of Malanaus, hold a similar belief with regard to the bear-cat (ARTICTIS) and the various species of PARADOXURUS; in this case the origin of the belief is admitted by them to be the fact that, on going to their graveyards, they often see one of these beasts coming out of a tomb. These tombs are roughly constructed wooden coffins raised a few feet only from the ground, and it is probable that these carnivores make their way into them, in the first place, to devour the corpse, and that they make use of them as lairs.

The relations of the Klemantans to the crocodiles seem to be more intimate than those of other tribes. One group, the Long Patas, claim the crocodile as a relative. The story goes that a certain man named Silau became a crocodile. First he became covered with itch, and he scratched himself till he bled and became rough all over. Then his feet began to look like a crocodile's tail; as the change crept up from his feet to his body, he called out to his relatives that he was becoming a crocodile, and made them swear that they would never kill any crocodile. Many of the people in olden days knew that Silau became a crocodile; they saw him at times and spoke to him, and his teeth and tongue were always like those of a man. Many stories are told of his meeting with people by the river-side. On one occasion a man sat roasting a pig on the river-bank, and, when he left it for a moment, Silau took it and divided it among the other crocodiles, who greatly enjoyed it. Silau then arranged with them that he would give a sign to his human relatives by which the crocodiles might always be able to recognise them when travelling on the river. He told his human friends that they must tie leaves of the DRACAENA below the bows of their boats; this they always do when they go far from home, so that the crocodiles may recognise them and so abstain from attacking them.

If a man of the Long Patas is taken by a crocodile, they attribute this to the fact that they have intermarried to some extent with Kayans. When they come upon a crocodile lying on the river-bank, they say, "Be easy, grandfather, don't mind us, you are one of us." Some of the Klemantans will not even eat anything that has been cooked in a vessel previously used for cooking crocodile's flesh, and it is said that if a man should do so unwittingly his body would become covered with sores.

If a crocodile is seen on their left hand by Long Patas on a war expedition, that is a bad omen; but if on their right hand, that is the best possible omen.

The Orang Kaya Tumonggong tells us that in the olden times the crocodiles used to speak to his people, warning them of danger, but that now they never speak, and he supposes that their silence is due to the fact that his people have intermarried with other tribes. The Long Patas frequently carve a crocodile's head as the figurehead for a war-canoes.

The Batu Blah people (Klemantans) on returning from the war-path make a huge effigy of a crocodile with cooked rice, and they put fowl's eggs in its head for eyes and bananas for teeth, and cover it with scales made from the stem of the banana plant. When all is ready it is transfixed with a wooden spear, and the chief cuts off its head with a wooden sword. Then pigs and fowls are slaughtered and cooked, and eaten with the rice from the rice-crocodile, the chiefs eating the head and the common people the body. The chief of these people could give us no explanation of the meaning of this ceremony; he merely says they do it because it is custom.

One community of Klemantans, the Lelak people, lived recently on the banks of a lake much infested with crocodiles. Their chief had the reputation of being able to induce them to leave the lake. To achieve this he would stand in his boat waving a bundle of charms, which included among other things teeth of the real tiger and boars'

tusks, and then address the crocodiles politely in their own language. He would then allow his boat to float out of the lake into the river, and the crocodiles would follow him and pass on down the river.

Many, probably all, Klemantans put up wooden images of the crocodile before their houses, and many of them carve the prow of their war-canoes into the form of a crocodile's head with gaping jaw.

Some of the Muruts make an effigy of the crocodile from clay for use on the celebration of a successful expedition.

#### The Punans

The Punans make use of all the omen-birds that are used by the Kenyahs, and they regard them as in some degree sacred, and not to be killed or eaten. They seem to read the omens in much the same way as the Kenyahs do; but they are not so constant in their cult of the omen-birds, and Punans of different districts differ a good deal from one another in this respect. In fact, it is doubtful whether those that have mixed least with the other peoples pay any attention to the omen-birds; and it seems not unlikely that the cult of the omen-birds is in process of being adopted by them.

With the exception of these birds there is probably no wild animal of the jungle that the Punans do not kill and eat. They refuse to eat the domestic pig, but this, they say, is because they know nothing of it, it is strange to them. Having no domestic pigs and fowls, they of course do not sacrifice them to their gods, nor do they seem to practise the rite of sacrifice in any form.

They give the names of various animals to their children, and they use these names in the ordinary way.

The crocodile seems to be regarded as a god by the Punans -- they speak of it as Bali Penyalong. (This, as we have already said, is the name of the Supreme Spirit of the Kenyahs.) They sometimes make a wooden image of it, and hang it before the leaf shelter or hut in which they may be living at any time; and if one of their party should fall ill, they hang the blossom of the betel-nut tree on the figure, and the medicine-man addresses it when he seeks to call back the wandering soul of his patient.

Punans certainly ascribe significance to the behaviour of a few animals other than those observed by the other peoples. Thus, if they see a lizard of any kind upon a branch before the shelter in which they are encamped, and especially if it utters its note, they regard this as a sign that enemies are near.

#### The Sea Dayaks or Ibans

The Ibans do not seem to have any conception that corresponds closely to the Supreme Spirit of the races with which we have already dealt. Archdeacon Perham[140] has given an account of the Petara of these people, showing how it is a conception of one god having very many manifestations and functions, each special function being conceived vaguely as an anthropomorphic deity. He has described also the mythical warrior-hero and demi-god Klieng, and the god of war, Singalang Burong. As Archdeacon Perham has said, this last deity has a material animal form, namely, the white-headed hawk, which is the Bali Flaki of the Kenyahs, and plays a somewhat similar part in their lives. But Singalang Burong is decidedly more anthropomorphic than Bali Flaki; he is probably generally conceived as a single being of human form living in a house such as the Ibans themselves inhabit; whereas Bali Flaki, even if sometimes conceived in the singular as the great Bali Flaki, is very bird-like. We have seen that the Kayans describe their hawk-god, Laki Neho, as dwelling in a house, which, though in the top of a tree, has a landing-stage before it on the river-bank.

In the case of the Kayans, the conception is only half-way on the road to a full anthropomorph; whereas with the Ibans the change has been completed and the hawk-god is completely anthropomorphic. Corresponding with this increased importance and definition of the anthropomorphic hawk-god, we find that for the Mans the virtue has departed out of the individual hawks, and that they are no longer consulted for omens; for the Ibans say that Singalang Burong never leaves his house, and that for this reason they do not take omens from the hawks when going on the war-path. Nevertheless, he is the chief or ruler over all the other omen birds, who are merely his messengers. He thus seems to have come to occupy almost the supreme position accorded to Bali Penyalong by the Kenyahs. The following notes are the statements made upon this subject by a very intelligent Iban of the Undup district: Once a year they make a big feast for Singalang Burong and sing for about twelve hours, calling him and Klieng and all the Petara to the feast. (This is the ceremony known as BURONG GAWAI. It is a most tedious and monotonous performance after the first few hours.) In olden days Singalang Burong used to come to these feasts in person as a man just like an Iban in appearance and behaviour. At the end of the feast he would go out, take off his coat, and fly away in the form of a white-headed hawk. Now they are not sure that he comes to

their feast, because they never see him, Singalang Burong is greater than Klieng, although, it is Klieng that gives them heads in war. Singalang Burong married an Iban woman, Kachindai Lanai Pantak Girak, and he gave all his daughters in marriage to the omen-birds. Dara Inchin Tembaga Monghok Chelabok married Katupong (SASIA ABNORMIS); Dara Selaka Utih Nujut married Mambuas (CARCURENTIS); Pingai Tuai Nadai Mertas Indu Moa Puchang Penabas married Bragai (HARPACTES); Indu Langgu Katungsong Ngumbai Dayang Katupang Bunga Nketai married Papau (HARPACTES DIARDI); and, lastly, Indu Bantok Tinchin Mas Ndu Pungai Lelatan Pulas married Kotok (LEPOCESTES). He had also one son, Agi Melieng etc., who married the daughter of Pulang Gana, the god of agriculture, her name being Indu Kachanggut Rumput Melieng Kapiian.

It was amusing and instructive to hear this Iban rattle off these enormous names without any hesitation, while another Iban sitting beside him guaranteed their accuracy.

In the olden days, it is said, there were only thirty-three individuals of each kind of omen-bird (including Singalang Burong). But although these thirty-three of each kind still exist, there are many others which cannot be certainly distinguished from them, and these do not give true omens. It would be quite impossible to kill any one of these thirty-three true representatives of each kind, however much a man might try.

Nevertheless, if an Iban kills an omen-bird by mistake, he wraps it in a piece of cloth and buries it carefully in the earth, and with it he buries rice and flesh and money, entreating it not to be vexed and to forgive him, because it was all an accident. He then goes home and will speak to no one on the way, and stays in the house for the rest of that day at least.

The Ibans read omens not only from the birds mentioned above as the son-in-law of Singalang Burong, but also from some other animals. And it is interesting to note that they have made a verb from the substantive BURONG (a bird), namely, BEBURONG (to bird), I.E. to take omens of any kind, whether from bird or beast. An excellent account of the part played by omens in the life of the Ibans has been given by Archdeacon Perham in the paper referred to above, and we have nothing further to add to that account.

The hornbill must be included among the sacred birds of the Iban, although it does not give omens. On the occasion of making peace between hostile tribes, the Ibans sometimes make a large wooden image of the hornbill and hang great numbers of cigarettes upon it; and these are taken from it during the ceremony and smoked by all the men taking part in it. On the occasion of the great peace-making at Baram in March 1899, at which thousands of Kenyahs, Kayans, Klemantans, and Ibans were present,[141] the Ibans made an elaborate image of the hornbill some nine feet in height, and hung upon it many thousands of cigarettes, and these were smoked by the men of the different tribes, all apparently with full understanding of the value of the act.

A special deity or spirit, Pulang Gana, presides over the rice-culture of the Ibans, but the crocodile also is intimately concerned with it. The following account was given us by an intelligent Iban from the Batang Lupar:

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Klieng first advised the Ibans to make friends with Pulang Gana, who is a PETARA and the grandfather ("AKI") of PADI. Pulang Gana first taught them to plant PADI and instructed them in the following rites: —

On going to a new district Ibans always make a life-size image of a crocodile in clay on the land chosen for the PADI-farm. The image is made chiefly by some elderly man of good repute and noted for skilful farming. Then for seven days the house is MALI, I.E. under special restrictions — no one may enter the house or do anything in it except eat and sleep. At the end of the seven days they go to see the clay crocodile and give it cloth and food and rice-spirit, and kill a fowl and a pig before it. The ground round about the image is kept carefully cleared and is held sacred for the next three years, and if this is not done there will be poor crops on the other farms. When the rites have been duly performed this clay crocodile destroys all the pests which eat the rice. If, in a district where Ibans have been long settled, the farm-pests become very noxious, the people pass three days MALI and then make a tiny boat of bark, which they call UTAP. They then catch one specimen of each kind of pest — one sparrow, one grasshopper, etc. — and put them into the small boat, together with all they need for food, and set the boat free to float away down the river. If this does not drive away the pests, they resort to the more thorough and certainly effectual process of making the clay crocodile.

Many Ibans claim the live crocodile as a relative, and, like almost all the other peoples, will not eat the flesh of crocodiles, and will not kill them, save in revenge when a crocodile has taken one of their household. They say that the spirit of the crocodile sometimes becomes a man just like an Iban, but better and more powerful in every way, and sometimes he is met and spoken with in this form.

Another reason given for their fear of killing crocodiles is that Ribai, the river-god, sometimes becomes a crocodile; and he may become also a tiger or a bear. Klieng, too, may become any one of five beasts, namely, the python, the maias, the crocodile, the bear, or the tiger, and it is for this reason that Ibans seldom kill these animals. For if a man should kill one which was really either Ribai or Klieng, he would go mad.

The Ibans are by nature a less serious-minded and less religious people than the Kenyahs and Kayans, and they have a greater variety of myths and extravagant superstitions; nevertheless, they use the fowl and the pig as sacrificial animals in much the same way as the other tribes. They eat the fowl and both the wild and domestic pig freely, except in so far as they are restrained by somewhat rigid notions of economy in such matters. The fowl plays a larger part than the pig in their religious practices, and its entrails are sometimes consulted for omens.

Ibans will kill and eat all kinds of deer, but there are exceptions to this rule. The deer are of some slight value to them as omen-givers. Horned cattle they will kill and eat, but they are not accustomed to their flesh, and few of them relish it.

Ibans have numerous animal fables that remind one strongly of AEsop's fables and the Brer Rabbit stories of the Africans. In these KORA, the land-tortoise, and PLANDOK, the tiny mouse-deer, figure largely as cunning and unprincipled thieves and vagabonds that turn the laugh always against the bigger animals and man.[142]

#### The NGARONG or Secret Helper

An important institution among some of the Ibans, which occurs but in rare instances among the other peoples, is the NGARONG[143] or secret helper. The NGARONG IS one of the very few topics in regard to which the Ibans display any reluctance to speak freely. So great is their reserve in this connection that one of us lived for fourteen years on friendly terms with Ibans of various districts without ascertaining the meaning of the word NGARONG, or suspecting the great importance of the part played by the notion in the lives of some of these people. The NGARONG seems to be usually the spirit of some ancestor or dead relative, but not always so, and it is not clear that it is always conceived as the spirit of a deceased human being. This spirit becomes the special protector of some individual Iban, to whom in a dream he manifests himself, in the first place in human form, and announces that he will be his secret helper; and he may or may not inform the dreamer in what form he will appear in future. On the day after such a dream the Iban wanders through the jungle looking for signs by which he may recognise his secret helper; and if an animal behaves in a manner at all unusual, if a startled deer stops a moment to gaze at him before bounding away, if a gibbon gambols about persistently in the trees near him, if he comes upon a bright quartzcrystal or a strangely contorted root or creeper,[144] that animal or object is for him full of a mysterious significance and is the abode of his NGARONG. Sometimes the NGARONG, then assumes the form of an Iban and speaks with him, promising all kinds of help and good fortune. If this occurs the seer usually faints away, and when he comes to himself again the NGARONG will have disappeared. Or, again, a man may be told in his dream that if he will go into the jungle he will meet his NGARONG in the form of a wild boar. He will then, of course, go to seek it, and if by chance other men of his house should kill a wild boar that day, he will go to them and beg for its head or buy it at a good price if need be, carry it home to his bed-place, offer it cooked rice and kill a fowl before it, smearing the blood on the head and on himself, and humbly begging for pardon. Or he may leave the corpse in the jungle and sacrifice a fowl before it there. On the following night he hopes to dream of the NGARONG again, and perhaps he is told in his dream to take the tusks from the dead boar and that they will bring him good luck. Unless he dreams something of this sort, he feels that he has been mistaken, and that the boar was not really his secret helper.

Perhaps only one in a hundred men is fortunate enough to have a secret helper, though it is ardently desired by many of them. Many a young man goes to sleep on the grave of some distinguished person, or in some wild and lonely spot, and lives for some days on a very restricted diet, hoping that a secret helper will come to him in his dreams.

When, as is most commonly the case, the secret helper takes on the form of some animal, all individuals of that species become objects of especial regard to the fortunate Iban; he will not kill or eat any such animal, and he will as far as possible restrain others from doing so. A NGARONG may after a time manifest itself in some new form, but even then the Iban will continue to respect the animal-form in which it first appeared.

In some cases the cult of a secret helper will spread through a whole family or household. The children and grandchildren will usually respect the species of animal to which a man's secret helper belongs, and will perhaps sacrifice fowls or pigs to it occasionally, although they expect no help from it; but it is asserted that if the

great-grandchildren of a man behave well to his secret helper, it will often befriend them just as much as its original protege.

The above general account of the secret helper is founded on the descriptions of many different Ibans, and we will now supplement it by describing several particular instances.

Anggus (an Ulu Ai Iban of the Batang Lupar) says that every Iban who has no NGARONG hopes to get some bird or beast as his helper at the BEGAWAI, the feast given to the PETARA. He himself has none, but he will not kill the gibbon because the NGARONG of his grandfather, who died twenty years ago, was a gibbon. Once a man came to his grandfather in a dream and said to him, "Don't you kill the gibbon," and then turned into a grey gibbon. This gibbon helped him to become rich and to take heads, and in all possible ways. On one occasion, when he was about to go on the war-path, his NGARONG came to him in a dream and said, "Go on, I will help you," and the next day he saw in the jungle a grey gibbon which was undoubtedly his NGARONG. When he died he said to his sons, "Don't you kill the gibbon," and his sons and grandsons have obeyed him in this ever since. Anggus adds that when a man dreams of a NGARONG for the first time he does not accept it, and will still kill animals of that kind; nor is a second dream enough; but when he dreams the same dream a third time, then his scepticism is overcome and he can no longer doubt his good fortune.

Anggus himself once shot a gibbon when told to do so by one of us. He first said to it, "I don't want to kill you, but the TUAN who is giving me wages expects me to, and the blame is his. But if you are really the NGARONG of my grandfather, make the shot miss you." He then shot and missed three times, and on shooting a fourth time he killed a gibbon, but not the one he had spoken to. Anggus does not think the gibbon helps either his father or himself.

Payang, an old Katibas Iban, tells us that he has been helped by a python ever since he was a youth, when a man came to him in a dream and said, "Sometimes I become a python and sometimes a cobra, and I will always help you." It has certainly helped him very much, but he does not know whether it has helped his children; nevertheless he has forbidden them to kill it. He does not like to speak of it, but he does so at our request. Payang concluded by saying that he had no doubt that we white men have secret helpers, very much more powerful than the Iban's, and that to them we owe our ability to do so many wonderful things.

Imban, an Iban who had recently moved to the Baram river from the Rejang, had once when sick seen in a dream the LABI-LABI, the large river-turtle (TRIONYX SUBPLANUS), and had made a promise that if he should recover he would never kill it. So when he settled on the Baram river as head of a household, he attempted to impose a fine on his people for killing the LABI-LABI, insisting that it was MALI to kill it or bring its carcass into his river. They appealed to one of us as the resident magistrate, and it was decided that if Imban wished to insist on this observance he must remove to a small tributary stream. This he has done, and a few of his people have followed him; and on them he enforces a strict observance of his cult of the river-turtle.

A still more interesting case is the following one: -- A community of Ibans were building a new house on the Dabai river some years ago, and one day, while they were at work, a porcupine ran out of a hole in the ground near by. During the following night one of the party was told by the porcupine in a dream to join their new house with his (the porcupine's). So they completed their house; and ever since that time they have made yearly feasts in honour of the porcupines that live beneath the house, and no one in the house dare injure one of them, though they will still kill and eat other porcupines in the jungle. They have had no death in the house during the seven years that it has been built, and this they attribute to the protecting power of the porcupines; and when any one is sick, they offer food to them, and regard their good offices as far more important than the ministrations of the MANANG (the medicine-man). Last year some relatives of these Ibans moved to this village, and for three months the knowledge of the part played by the porcupines was hidden from them as a mysterious secret. At the end of that time this precious mystery was disclosed to the new-comers, and the porcupines were feasted with every variety of cooked rice, some of it being made into a rude image of a porcupine, and with rice-spirit and cakes of sugar and rice-flour, salt and dried fish, oil, betel-nut, and tobacco. Several fowls were slain, and their blood was daubed on the chin of each person in the house, a ceremony known as ENSELAN. The liver of one fowl was carefully taken out and put with the food offered to the porcupines, that they might read the omens from it; and they were then informed of the arrival of the new-comers. The fowls were waved over the heads of the people by the old men, while they prayed the porcupines to give them long life and health, and a token of their goodwill in the form of a smooth rounded pebble. On an occasion of this sort it is highly probable that the

required token will be found; for the secret helper would no doubt be surreptitiously helped by some member of the household who, being deficient in faith, prefers to make a certainty of so important a matter rather than leave it entirely to the NGARONG.

Inquiries made since the publication of the facts reported in the foregoing paragraphs have shown us that the cult of the NGARONG or secret helper is probably not common to all branches of the Sea Dayaks people. We have heard of its occurrence amongst the Ulu Ai Dayaks both of the Batang Lupar and Rejang districts, but we have no positive knowledge of its occurrence among other branches unless the custom known as NAMPOK has some connection with it.

#### Conclusion

We have now to discuss some problems suggested by a review of the facts set forth above, and to bring forward a few additional facts that seem to throw light on these questions.

The question that we will first discuss is this: Are all or any of the instances of peculiar regard paid to animals, or of animals sacrificed to gods or spirits, or of the ceremonial use of their blood, to be regarded as institutions surviving from a fully developed system of totemism now fallen into decay? It will have been noticed that many of the features of totemism, as it occurs in its best developed forms, occur among the people of one or other of the tribes of Sarawak. We have, in the first place, numerous cases in which a whole community refuses to kill or eat an animal which is believed to protect and aid them by omens and warnings and in other ways, and in which the animal is worshipped with prayer and sacrifice (E.G. the hawk among various tribes); we have at least one instance of a community claiming to be related to a friendly species (Long Patas and the crocodile), and having as usual an extravagant myth to account for the belief; we have the domestic animal that is sacrificially slain, its blood being sprinkled on the worshippers and its flesh eaten by them, and that is never slain without religious rites (pig of the Kenyahs and Kayans); we have the animal that must not be killed tattooed on the skin of the men (the dog), or its skin worn by fully grown men only (the tiger-cat), or images of it made of clay or carved in wood and set up before the house (the hawk and crocodile); we have also the animal that is claimed as a relative imitated in popular dances (the Dok-monkey of the Kayans); the belief that the souls of men assume the form of some animal that must not be killed or eaten (deer and the ARCTOGALE among Klemantans); the observance by invalids of a very strict avoidance of contact with any part of an animal that must not be killed or eaten in any case (horned cattle among many Kenyahs and Kayans).

Not only do we see these various customs, which in several parts of the world have been observed as living elements of totem-cults, and which in other parts have been accepted as evidence of totem-worship in the past, but in the agricultural habits of the people we may see an efficient cause of the decay of totemism, if at some time in the past it has flourished among them. For it has been pointed out, especially by Mr. Jevons in his INTRODUCTION TO THE HISTORY OF RELIGION, that totemism seems to flourish most naturally among tribes of hunters, and that the introduction of agriculture must tend towards its decay. Now there is some reason to suppose that the introduction to Borneo of rice and of the art of cultivating it is of comparatively recent date. Crawford reckoned that the cultivation of PADI was introduced to the southern parts of Borneo from Java some 300 years ago, and into the northern parts from the Philippine Islands about 150 years ago. But whatever the date of the occurrence may have been, it seems to be certain that, by the introduction of PADI cultivation from some other country, most of the tribes of Sarawak were converted, probably very rapidly, from hunting to agriculture. This conversion must have caused great changes in their social conditions and in their customs and superstitions; and, if totemism flourished among them while they were still simple hunters, its decay may well have been one of the chief of these changes.

A second factor that would have tended to bring about this change is the prevalence of a belief in a god or beneficent spirit more powerful than all others, and more directly concerned with the welfare of his worshippers, however this belief may have come into being. And a third factor that may have tended in the same direction is the custom of head-hunting, and the important part played by the heads in the religious life of the people. For there is some reason to think that head-hunting is a comparatively young institution among the tribes of Sarawak.

But in spite of all this, and although we do not think it is possible completely to disprove the truth of the hypothesis that some or all of these animal cults are vestiges of a once fully developed totemic system, we are inclined to reject it. We are led to do so by four considerations. In the first place, if by totemism we mean a social organisation consisting in the division of a people into groups or clans, each of which worships or holds in

superstitious regard one or more kinds of animal or plant, or other natural objects to which the members of the group claim to be related by blood or by descent, then it seems to us sufficiently wonderful that this system should have existed among peoples so remote from one another in all things, save certain of the external conditions of life, as the Indians of North America and the natives of Australia. And it seems to us that to invoke the aid of the hypothesis of totemism in the past to explain the existence of a set of animal or plant superstitions in any particular case is but to increase the mystery that shrouds their origin; for unless it can be shown that the adoption or development of totemism by any people brings with it immense advantages for them in the struggle for existence, every fresh case in which the evidence compels us to admit its occurrence, whether in the past or as a still flourishing institution, can but increase the wonder with which we have to regard its wide distribution.

Secondly, we have in the total absence of totemism among the Punans very strong ground for rejecting the suggestion of its previous existence among the Kenyahs. For in physical characters, in language, and, as far as the difference in the mode of life permits, in customs and beliefs, the Punans resemble the Kenyahs so closely that we must assume them to be closely allied by blood; and it seems probable that the Punans have merely persisted in the cultural condition from which the Kenyahs and other tribes have been raised by the adoption of agriculture and the practice of building substantial houses. Yet, as we have said, the Punans, although in that condition of nomadic hunters which is probably the most favourable to the development and persistence of totemism, observe hardly any restrictions in their hunting, and in fact seem to kill and eat with equal freedom almost every bird and beast of the jungle, shooting them with the blow-pipe and poisoned darts with consummate skill. The only exceptions to this rule are, so far as we know, the omen-birds, a carnivore, and a lizard, and, as we have said, it seems doubtful whether even these are excepted in the case of Punans who have not had much intercourse with other peoples.

Thirdly, although it may be said that even at the present time many of the features of the religious side of totemism are present, we have not been able to discover any traces of a social organisation based upon totemism. There is no trace of any general division of the people of any tribe into groups which claim specially intimate relations with different animals, except in the case of the Klemantans; and in their case such special relations seem to be the result merely of the different conditions under which the various scattered groups now live. There are no restrictions in the choice of a wife that might indicate a rule of endogamy or exogamy. There are no ceremonies to initiate youths into tribal mysteries; certain ceremonies in which the youths take a leading part are directed exclusively to training them for war and the taking of heads in battle. We know of no instance of any group of people being named after an animal or plant which is claimed as a relative; and in the case of the more homogeneous tribes, such as the Kenyahs and Kayans, all prohibitions with regard to animals and all benefits conferred by them are shared equally by all the members of any one community, and, with but very few exceptions, are the same for all the communities of the tribe.

Lastly, we think it unnecessary to regard the various animal superstitions of these tribes as survivals of totemism, because it seems possible to find a more direct and natural explanation of almost every case. The numerous cases seem to fall into two groups: the superstitious practices concerned with the sacrificial animals, the pig and fowl on the one hand, and all those concerned with the various other animals on the other hand. These latter may, we think, be regarded as the expression of the direct and logical reaction of the mind of the savage to the impression made upon it by the behaviour of the animals.

It has been admirably shown by Professor Lloyd Morgan[145] how we ourselves, and even professed psychologists among us, tend to overestimate the complexity of the mental processes of animals; and there can be no doubt that savages generally are subject to this error in a very much greater degree, that, in fact, they make, without questioning and in most cases without explicit statement even to themselves, the practical assumption that the mental processes of animals — their passions, desires, motives, and powers of reasoning — are of the same order as, and in fact extremely similar to, their own. That the Kenyahs entertain this belief in a very practical manner is shown by their conduct when preparing for a hunting or fishing excursion. If, for example, they are preparing to poison the fish of a section of the river with the "tuba" root, they always speak of the matter as little as possible, and use the most indirect and fanciful modes of expression. Thus they will say, "There are many leaves floating here," meaning, "There are plenty of fish in this part of the river." And these elaborate precautions are taken lest the birds should overhear their remarks and inform the fish of their intentions — when, of course, the fish would not stay to be caught, but would swim away to some other part of the river.



Since this belief seems to be common to all or almost all savages and primitive peoples, it would be a strange thing if prohibitions against killing and eating certain animals and various superstitious practices in regard to animals were not practically universal among them. Bearing in mind the reality of this belief in the minds of these peoples, it is easy to understand why they should shrink from killing any creature so malignant-looking and powerful for harm as a snake, and why they should feel uneasy in the presence of, and to some extent dread, the MAIAS and the longnosed monkey, creatures whose resemblance to man seems even to us somewhat uncanny. Their objection to killing their troublesome and superfluous dogs seems to be due to a somewhat similar feeling — a recognition of intelligence and emotions not unlike their own, but mysteriously hidden from them by the dumbness of the animals. In the same way it is clear that it is but a very simple and logical inference that the crocodiles are a friendly race, and but the clearest dictate of prudence to avoid offending creatures so powerful and agile; for if the crocodiles were possessed of the mental powers attributed to them by the imagination of the people, they might easily make it impossible for men to travel upon the rivers or dwell on their banks. A similar process would lead to the prohibition against the eating of the tiger-cat, the only large and dangerous carnivore.

The origin of the prohibitions against killing and eating deer and horned cattle is perhaps not so clear. But it must be remembered that until very recently the only horned cattle known to the tribes of the interior were the wild cattle (the Seladang of the Malay peninsula), very fierce and powerful creatures. These wild cattle hide themselves in the remotest recesses of the forests, and, as they are but very rarely seen, they may well be regarded as somewhat mysterious and awful. Deer, on the other hand, abound in the forests, and, like most deer, are very timid; and it is perhaps their timidity that has led in some cases to the prohibition against their flesh, for we have seen how a Kenyah chief feared lest his little son, safe at home, should be infected with the deer's timidity if he himself a hundred miles away should come in contact with the skin of one. In another case we have seen that by the people of one community deer are regarded as relatives, or as containing the souls of their ancestors, and that this belief probably had its origin in the fact that deer are in "the habit of frequenting the grassy clearings made about the tombs by the people. And we saw that a similar belief in respect of certain carnivores probably had a similar origin.

We think that even the elaborate cult of the hawk and of the other omen-birds is to be explained on these lines. If we think of the hawk's erratic behaviour, how he will come suddenly rushing down out of the remotest blue of the sky to hover overhead, and then perhaps to circle hither and thither in an apparently aimless manner, or will keep flying on before a boat on the river, or come swiftly to meet it, screaming as he comes, — if we think of this, it is easy to understand how a people whose whole world consists of dense forests and dangerous rivers, a people extremely ignorant of natural causation, yet intelligent and speculative, and always looking out for signs that shall guide them among the mystery and dangers that surround them, may have come to see in the hawk a messenger sent to them by the beneficent Supreme Being. For this Being is vaguely conceived by them as dwelling in the skies whence the hawk comes, and whither he so often returns. And then we may suppose that the messenger himself has come to be an object of worship in various degrees with the different tribes, as seems to be the rule in all religious systems in which servants of a deity mediate between him and man.

The origin of the various rites in which the fowl and pig are sacrificed, and their blood smeared or sprinkled on men or on the altar-posts of gods, or on the image of the hawk, and their souls charged with messages to the Supreme Being — the origin of this group of customs must be sought in a different direction. To any one acquainted with Robertson Smith's RELIGION OF THE SEMITES, and with Mr. Jevon's INTRODUCTION TO THE HISTORY OF RELIGION, the idea naturally suggests itself that these animals are or were true totems, of which the cult has passed into a late stage of decay. It might be supposed that, being originally totem animals, they thereby became domesticated by their worshippers; that they were occasionally slain as a rite for the renewal of the bond between them and their worshippers, their blood being smeared or sprinkled on the latter, and their flesh ceremonially eaten by them; and that the eating of them has become more and more frequent, until now every religious rite, of however small importance, is made the occasion for the killing and eating of them. It might also be supposed that, with the development or the adoption of the conception of a Supreme Being, the original purpose and character of the rites had become obscure, so that the slaughtered animals are now regarded in some cases as sacrifices offered to the deity.

But we do not think that this tempting hypothesis as to the origin of the rites can be upheld in this case. In the first place, the wild pig of the jungle is hunted in sport and killed and eaten freely by all the various tribes, and is,

in fact, treated on the whole with less respect and ceremony than perhaps any other animal. Secondly, the domestic pig differs so much from the wild pig that Mr. Oldfield Thomas has pronounced it to be of a different species, and it seems possible that it has been introduced to Borneo by the Chinese at a comparatively recent date. Further, there is reason to suppose that the custom of sacrificing pigs and fowls arose through the substitution of them for human beings in certain rites. For there is a number of rites of which it is admitted by the people that the slaughter of human beings was formerly a central feature; of these, the most important and the most widely spread are the funeral rites of a great chief, the rites at the building of a new house, and those on returning from a successful war expedition. In all these fowls or pigs are now substituted as a rule, but we know of instances in which in recent years human beings were the victims. Thus some years ago, on the death of the chief of a community of Klemantans (the Orang Bukit), a slave was bought by his son, and a feast was made, and the slave was killed through each man of the community giving him a slight wound. This was said to be the revival of an old and almost obsolete custom. In another recent case, when a mixed party of Kayans and Kenyahs returned from a successful war expedition, only the Kenyahs had secured heads. The Kayans therefore took an old woman, one of the captives, and killed her by driving a long pole against her abdomen, as many of them as possible taking part by holding and helping to thrust the pole. The head was then divided among the parties of Kayans, and pieces of the flesh were hung on poles beside the river, just as is done with the flesh of slain enemies and with the flesh of the pigs that are always slaughtered on such occasions. It was said that this killing of a human being was equivalent to killing a pig, only much finer.

Kayans tell us that they used to kill slaves at the death of a chief, usually three, but at least one, and that they nailed them to the tomb, in order that they might accompany the chief on his long journey to the other world and paddle the canoe in which he must travel. This is no longer done, but a wooden figure of a man is put up at the head and another of a woman at the foot of the coffin of a chief as it lies in state before the funeral. And a small wooden figure of a man is usually fixed on the top of the tomb, and it is said that this is to row the canoe for the chief. A live fowl is usually tied to this figure, and although it is said to be put there merely to eat the maggots, we think there can be no doubt that we see here going on the process of substitution of fowl for slave.

In building a new house it is customary among almost all these tribes to put a fowl into the hole dug to receive the first of the piles that are to support the house, and to allow the end of the pile to fall upon the fowl so as to kill it. The Kenyahs admit that formerly a girl was usually killed in this way, and there is reason to believe that in all cases a human victim was formerly the rule, and that the fowl is a substitute merely.[146]

In the following cases, too, we see the idea of substitution of fowls or pigs for men.

It is customary with the Malanaus of Niah to kill buffalo, and also to kill fowls, and put them together with eggs on poles in the caves in which the swifts build the edible nests, in order to secure a good crop of nests. One year, when the nests were scanty they bought a slave in Brunei, and killed him in the cave, in the hope of increasing the number of nests.

It was formerly the custom to exact a fine of one or more slaves as punishment for certain offences, E.G. the accidental setting fire to a house. At the present time, when slaves are scarcer than of yore, they are rarely given in such cases, but usually brass gongs; and the gongs are always accompanied by a pig.

Now, when slaves were killed and nailed to the tomb of a chief, the purpose was perfectly clear and simple. It was done in just the same spirit in which the weapons and shield and clothing are still always hung on the tomb of a deceased warrior, in order, namely, that his shade may not be without them on the journey to the other world. On the introduction of the domestic pig it may well have become customary for the poorer classes, who could not afford to kill a slave, or for families which owned no slaves, to kill a pig as in some degree a compensation for the want of human victims. If such a custom were once introduced, it may well have spread rapidly from motives of both economy and humanity; for a slave is as a rule very kindly treated by his master, and in many cases comes to be regarded as a member of the family.

We may suppose, too, that it was formerly the custom to kill a slave when prayers of public importance were made to the Supreme Being, in order that the soul of the slave might carry the prayer to him. If this was the case, the substitution of pig for slave, on the introduction of the domestic pig, may be the more readily conceived to have become customary, when we remember that these people regard the souls of animals as essentially similar to their own.[147] If such a custom of substitution once gained a footing, it would naturally become usual to take the opportunity of communicating with the higher powers whenever a pig was to be slaughtered.

This view, that in all sacrifices of the pig and fowl these are but substitutes for human victims, finds very strong support in the following facts: — The Kalabits, a tribe inhabiting the north–western corner of the Baram district, breed the water–buffalo and use it in cultivating their land. It has probably been introduced to this area from North Borneo at a recent date. The religious rites of this people closely resemble those of the tribes with which we have been dealing above; but in all cases in which pigs are sacrificed by the latter, buffaloes are used by the Kalabits.

The rite of sprinkling the blood of pigs and fowls on men and on the altar–posts and images may, we think, be an extension or adaptation of the blood–brotherhood ceremony. We have seen that with the Kayans and Kenyahs the essential feature of this ceremony is the drawing of a little blood from the arm of the two men, each of whom then drinks or consumes in a cigarette the blood of the other one. Such a rite calls for no remote explanation; it seems to have suggested itself naturally to the minds of primitive people all the world over as a process for the cementing of friendship. When two hostile communities wished to make a permanent peace with one another, it would be natural that they should wish to perform a ceremony similar to the rite of blood–brotherhood. But the interchange of drops of blood between large numbers of persons would obviously be inconvenient; and if the idea of substituting fowls and pigs for human victims had once taken root in their minds, it would have been but a small step to substitute their blood for human blood in the peacemaking ceremonies. We have seen above that in such a ceremony fowls are exchanged by the two parties, so that the men of either party are smeared with the blood of the fowl originally belonging to the other party. It may be that here, too, the blood of slaves was formerly used, but of this we have no evidence. The custom of smearing the blood of fowls and pigs on the two parties to a friendly compact having been arrived at in this way, the rite might readily be extended to the cases in which the hawk, represented by his wooden image, or the Supreme Being, also represented by an image, is invoked as one of the parties to the compact. We are inclined to think that in some such way as we have here suggested, namely, by the substitution of pigs and fowls for human victims, and of their blood for human blood, the origin of the customs of sacrificing fowls and pigs, and of ceremonially sprinkling their blood, may be explained.

We conclude, then, that the various superstitions entertained by these tribes in regard to animals are not to be looked upon as survivals of totemism, but that they may all be explained in a simpler and more satisfactory manner.

#### Suggested Theory of the Origin of Totemism

Before bringing this chapter to an end, we would point out that among the facts we have described there are some which seem to suggest a possible and, indeed, as it seems to us, a very natural and probable mode of origin of totem–worship. We refer to the varieties of the NGARONG of the Ibans and sporadic analogous cases among the other tribes. We have seen that the NGARONG may assume the form of some curious natural object, or of some one animal distinguished from its fellows by some slight peculiarity, which receives the attentions of some one man only. In such cases the NGARONG is hardly distinguishable from a fetish. In other cases the man, being unable to distinguish the particular animal which he believes to be animated by his NGARONG, extends his regard and gratitude to the whole species. In such a case it seems difficult to deny the name "individual totem" to the species, if the term is to be used at all. In other cases, again, all the members of a man's family and all his descendants, and, if he be a chief, all the members of the community over which he rules, may come to share in the benefits conferred by his NGARONG, and in the feeling of respect for it and in the performance of rites in honour of the species of animal in one individual of which it is supposed to reside. In such cases the species approaches very closely the clan–totem in some of its varieties. (In speaking of the "Kobong" of certain natives of Western Australia, Sir G. Grey[148] says, "This arises from the family belief that some one individual of the species is their nearest friend, to kill whom would be a great crime, and to be carefully avoided.")

Of similar cases among other tribes of guardian–animals appearing to men in dreams and claiming their respect and gratitude, we must mention the case of Aban Jau, a powerful chief of the Sebops, a Klemantan sub–tribe. He had hunted and eaten the wild pig freely like all his fellow–tribesmen, until once in a dream a wild boar appeared to him, and told him that he had always helped him in his fighting. Thereafter Aban Jau refused, until the day of his death, to kill or eat either the wild or the domestic pig, although he would still consult for omens the livers of pigs killed by others.[149]

We have described above (vol. ii., p. 76) how a Kayan may become blood–brother to a crocodile in a dream, and may thereafter be called Baya (crocodile), and how in this way one Kayan chief had come to regard himself

as both son and nephew to crocodiles, and how he believed that they brought him success in hunting and carried him ashore when (in a dream) he had fallen into the river. The cousin of this chief, too, regarded himself as specially befriended by crocodiles because his great-grandfather had become blood-brother to one in a dream. So it is clear that the members of the family to which these young men belong are likely to continue to regard themselves as related by blood to the crocodiles, and bound to them by special ties of gratitude.

In another case we saw how all the people of one household regard themselves as related to the crocodiles and specially favoured by them, explaining the relation as due to one of their ancestors having become a crocodile. In another case we saw that some ill-defined relation to the gibbon is claimed by a community of Kenyahs whose house is decorated with carvings of the form of the gibbon, and whose members will not kill the gibbon. And in yet another case we saw that a Kayan house is decorated with conventionalised carvings of some animal whose species has been forgotten by the community. In each of these last three cases, it seems highly probable that the special relation to the animal was established by some such process as we see going on in the preceding case; so that we seem to have in this series one case of incipient totemism and others illustrating various stages of decay of abortive beginnings of totemism. And it is easy to imagine how in the absence of unfavourable conditions such beginnings might grow to a fully developed totem-system. For suppose that in any one community there happened to be at one time two or more prosperous families, each claiming to be related with and protected by some species of animal as the result of friendly overtures made by the animals to members of the families in their dreams. It would then be highly probable that members of other families, envious of the good fortune of these, would have similar dream experiences, and so come to claim a similar protection; until very soon the members of any family that could claim no such protection would come to be regarded as unfortunate and even somewhat disreputable beings, while the faith of one family in its guardian-animal would react upon and strengthen the faith of others in theirs. So a system of clan-totems would be established, around which would grow up various myths of origin, various magical practices, and various religious rites.

It is well known that such dreams as convince the Iban, the Kayan, and the Kenyah of the reality of his special relation to some animal, and lead him to respect all animals of some one species, produce similar results in other parts of the world. We quote the following passages from Mr. Frazer's remarks on individual totems in his book on totemism: — "An Australian seems usually to get his individual totem by dreaming that he has been transformed into an animal of that species." "In America the individual totem is usually the first animal of which a youth dreams during the long and generally solitary fast which American Indians observe at puberty." Such dream experiences are then the *VERA CAUSA* of the inception of faith in individual totems among the peoples in which totemism is most highly developed; and among the tribes of Sarawak we find cases which illustrate how a similar faith, strengthened by further dreams and by the good fortune of its possessor, may spread to all the members of his family or of his household and to his descendants, until in some cases the guardian animal becomes almost, though not quite, a clan-totem. The further development of such incipient totems among these tribes is probably prevented at the present time, not only by their agricultural habits, but also by their passionate addiction to war and fighting and head-hunting; for these pursuits necessitate the strict subordination of each community to its chief, and compel all families to unite in the cult of the hawk to the detriment of all other animal-cults, because the hawk is, by its habits, so much better suited than any other animal to be a guide to them on warlike expeditions.[150]

The prevalence of the belief in a Supreme Being must also tend to prevent the development of totemism.

#### Plants

In Chapter VI. we have described most of the superstitious beliefs and practices connected with the PADI plant and the rice.

It is not clear that any other plants are regarded as be-souled; but we mention here certain customs in connection with some of them that seem to point in that direction. The SILAT, a common jungle palm, figures most prominently in rites and beliefs of the Kayans. The leaves of this palm are used to decorate the heads taken in war; and on the occasion of any ceremonial use of the heads, fresh leaves are always hung upon or about them. No other leaves will serve this purpose, though it is difficult to say in what the special virtue of this plant consists. The leaves of the same plant are hung about the doorway of a new house when the people first take up their abode in it; but it is hung in such a way that passers-by do not brush against it, and children especially are kept away from it. It is commonly hung about the altar-posts of the gods; and it is a strip of this leaf that is tied about the

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wrist of a sick man to confine his soul to his body at the close of the soul-catching ceremony. It is tied also about the wrists of men returning from any warlike expedition. When applied for any ceremonial purpose it is called ISANG; and it is not until it has been so used that it becomes an "unclean" object. It is used in its merely material aspect for roofing leaf shelters in the jungle, and is put to other similar uses to which the broad tough leaves are well adapted. Most or all of the peoples use the leaves of this plant in the same ways as the Kayans.

LONG, a species of CALADIUM, is commonly hung, both root and leaves, upon the door of a room to mark that it is LALI (tabu) owing to sickness, harvesting, or any other circumstance.

OROBONG, a weed (not unlike the foxglove in appearance) which always grows freely among the young PADI, is gathered by the female friends of any woman passing through the ordeal of childbirth. They boil the leaves and wash her body with the decoction on several days following the delivery. It is held that, if this is not done, the woman's abdomen will not regain its normal state. This usage also is common to the Kayans with many other tribes.

The leaves of the DRACAENA are sometimes tied beneath the prow of a boat during journeys to distant parts (as mentioned on p. 70, vol. ii.); they are also hung upon the tombs and, with the ISANG, upon altar posts, when the rites are performed.

The Ibans and some of the Klemantans will not make the first stroke in cutting down the TAPANG tree (ARBOURIA), alleging that, if they do so, great troubles will befall them.

### Supplementary Note on the NGARONG

Since correcting the proofs of this chapter we have come upon a brief account of the guardian spirits of the Iban, which corroborates our account of the Ngarong. It is contained in a series of papers entitled RELIGIOUS RITES AND CUSTOMS OF THE IBANS OR DYAKS OF SARAWAK, BORNEO, written by Leo Nyuak (an Iban educated in a mission school), and translated by the Very Rev. Edm. Dunn (ANTHROPOS, vol. i. p. 182, 1905). In this account the guardian spirit is called TUA, and we are told that "The TUA or guardian spirit of an Iban has its external manifestation in a snake, a leopard, or some other denizen of the forest. It is supposed to be the spirit of some ancestor renowned for bravery, or some other virtue, who at death has taken an animal form ... it is revealed in a dream what animal form the honoured dead has taken."

## CHAPTER 16. Magic, Spells, and Charms

Magic is in a comparatively neglected and backward condition among the Kayans and Kenyahs, Punans, Ibans, and the more warlike up-country Klemantans. On the other hand, some of the coastwise tribes of Klemantans, especially the Malanaus and Kadayans, cultivate magic with some assiduity.

The Kayans dislike and discourage all magical practices, with the exception of those which are publicly practised for beneficent purposes and have the sanction of custom.

In the old days they used to kill those suspected of working any evil by magic. There are no recognised magicians among them other than the DAYONGS, and these, as we have seen, perform the functions of the priest and the physician rather than those OF the wizard or sorcerer.

Some of the DAYONGS make use at certain ceremonies of a rough mask carved out OF wood, or made from the shell of a gourd. The mask is merely an oval shell with slits for eyes and mouth, generally blackened with age and use. It may be worn during the soul-catching ceremony, but not during attendance on the recently deceased. This use of a mask is not known to us among any other of the peoples (Pl. 151).

The medicine man of the Ibans is known as MANANG; the MANANGS are more numerous than the DAYONGS of the Kayans; they are more strictly professional in the sense that they do but little other work, depending chiefly on what they can earn by their treatment of disease and by other ways of practising upon the superstitions of their fellows. They generally work in groups of three or four, or more in cases of serious illness, and, with the imitativeness and disregard for tradition characteristic of the IBAN, they have developed a great variety of procedures,[151] into most of which the element of deliberate fraud enters to a much greater extent than into the practice of the Kayan DAYONGS. The Sea Dayak MANANG is usually covered with skin disease (tinea) and shirks all hard work with the other members of the village.

A peculiar and infrequent variety of Sea Dayak MANANG are the MANANG BALI. They are men who adopt and continuously wear woman's dress and behave in all ways like women, except that they avoid as far as possible taking any part in the domestic labour. They claim to have been told in dreams to adopt this mode of life; they are employed for the same purpose as the more ordinary MANANGS, and they practise similar methods.

Among the IBANS certain persons get a bad reputation for working harm by magic. They are said to be cunning in sorcery (TAU TEPANG), and these persons may properly be said to be sorcerers or witches. They are believed to work harm in many ill-defined ways, especially to health; but their procedures are not generally known; they probably include poisoning, but, like the practices of our European witches in recent times, they probably have but little existence outside the timorous imaginations of the people. Such persons are disliked and shunned, though not killed as they would be among Kayans or Kenyahs. They are not professional sorcerers, I.E. their help is not called in by other persons who wish to work evil on their enemies, for others do not dare to do this. At the present time in Sarawak, if a man accuses another of practising TEPANG, he is liable to be sued for libel and fined.[152]

### Black Magic

The most important of the magical practices is one known and occasionally resorted to among all the peoples for the purpose of bringing about the death of a personal enemy. We describe the procedure as carried out by the Sebops (Klemantans), but in all essentials the account holds good for all or nearly all the peoples. It is not usual to invoke the aid of any recognised magician. The man whose heart is filled with hatred against another will retire secretly to a spot at the edge of a PADI field, or of some other clearing, where he can see a large expanse of sky and yet feel sure of being unobserved. Here he sets up the BATANG PRA, a pole supported horizontally some six or eight feet above the ground, its ends resting on two vertical poles. A little figure of a man or woman (according to the sex of the person aimed at), which has been carved for the purpose out of soft wood, is fixed upright in the ground beneath the BATANG PRA. This is called TEGULUN KALINGAI USA, which, literally translated, is "the reflected image of the body." The operator makes a fire beside the TEGULUN, digs a small hole in the ground, and fills it with water coloured with ferruginous earth. This pool is called BAWANG DAAR,[153] the

lake of blood. Sitting before the TEGULUN he scans the space of sky framed by the BATANG PRA, searching for some hawk upon the wing. As soon as he sees a hawk within this area, he addresses it, waving in one hand a small frayed stick, and saying, "Put fat in the mouth of So-and-So," and he puts a bit of pork fat into the mouth of the TEGULUN. Then saying, "Send him to BAWANG DAAR," he immerses the TEGULUN in his pool of reddened water; and taking it out again he thrusts into it a little wooden spear. After this he buries the TEGULUN in a hole in the ground, covering it with earth. (Only people who die by violence or of some much-feared disease are normally buried in this fashion.) This done he keeps shouting to the hawk to go to the left, at the same time waving his stick in that direction. If the hawk passes out of the area of operations towards the right, he knows that his attempt will not succeed, and he desists for the time being; if it flies out to the left he knows that his arts will prevail, and he addresses the hawk as follows: ---

"BALI FLAKI TUAI MUSIT, OU MATEI IYA KALUNAN ITO TAMA ODOH (the name of the victim), TUJU KAU, BALI FLAKI, MIEU TUOR BAWANG DAAR AU MULOH USUK, BALI FLAKI, MIEU NIAK BOIN NA ALAM UJUN, PALA UJA MATEI SAGAM; MATEI DAAR KAYU SAGAM; MATEI SUAT; MATEI AIOH SAGAM; MATEI MANYAT ALAM SUNGEI; MATEI PADAM; MATEI NAKAP BAYA; MATEI SAKIT ULUN; MATEI SAKIT USOK." (Translation runs --- "O Bali Flaki, go your way, let this man Tama Odoh die; go and put him in the lake of blood, O Bali Flaki; stab him in the chest, Bali Flaki, put fat of pig in his mouth that he may die to-morrow (this is equivalent to --- let his head be taken; for fat is always put in the mouth of the head taken in battle); let him be killed by a falling tree, to-morrow; let him die from a wound; let him die by the hand of his enemy, tomorrow; let him be drowned, to-morrow; let him die of a deadly disease; let him be caught by a crocodile; let him die of pain in the head; let him die of pain in the chest.") It will be observed that the formula calls upon the hawks to give effect to the malevolent wishes, so that the operation is not one of direct magical or sympathetic action, but rather is one by which the aid of a higher power is invoked. This feature of the process renders it one which the strongest minded cannot pooh-pooh.

With this comprehensive curse the rite is concluded and the vengeful man returns home and secretly observes his enemy. The latter may become aware that magic is being worked against him through dreaming that fat is put into his mouth; and as he is probably more or less aware of the hatred of his enemy, it is not unlikely that such a dream will come to him.[154] There can be no doubt that, if in this or any other way a man learns that he has been made the object of a magical attempt of this sort, he, in many cases, suffers in health; and it is probable that in some cases such knowledge has proved fatal. If it is discovered that any man has attempted to injure another in this way, he falls into general reprobation, and, if the case can be proved against him, heavy damages in the form of pigs, gongs, etc., may be awarded by the house-chief.

A curse is sometimes imposed without formality, and in the heat of the moment, in the face of their enemy. Under these circumstances the curse is usually muttered indistinctly, and seems then to work upon the victim all the more powerfully. The words used are similar to those of the curse written out above.

A characteristic bit of Iban magic is the following: --- A man, angered by finding that some one has deposited dirt in or about his property or premises, takes a few burning sticks and, thrusting them into the dirt, says, "Now let them suffer the pains of dysentery."

#### Therapeutic Magical Procedures

It was said in Chapter XIV. that the Kayans treat disease by three distinct methods, namely, by soul-catching, by drugs and regimen, and by extraction of the supposed cause of the trouble. This last operation seems to fall under the head of magic and may be described here. It is usually performed by the DAYONGS, and is applied more particularly in cases in which localised pain is a prominent feature of the disorder. The DAYONG comes provided with a short tube, prepared by pushing out the core of a section of the stem of a certain plant of the ginger family. After inquiring of the patient the locality of his pains, he holds up the polished blade of a sword, and, gazing at it as one seeing visions, he sings a long incantation beginning: ---

BALI DAYONG USUN LASAN URIP ULUN KAM KELUNAN NINI KETAI NATONG TAWANG  
LEMAN BALI DAYONG.[155]

The crowd of people, men and women, sitting round the central figure, join in the BALI DAYONG, which recurs as the refrain at the end of each verse, intoning in loud deep voices. It seems clear from the use of the words BALI DAYONG that the whole is addressed to some superior power; for no human DAYONG, and indeed no human being, is addressed or spoken of with the title BALI. And it would perhaps be more correct, therefore,

to describe the address as a supplication rather than an incantation, and the whole operation as a religious rite rather than a magical procedure. But we are here on the disputed borderland between magic and religion, and other features incline us to regard the process as magical rather than religious.

During the singing of a number of verses in this way, the DAYONG seems to become more and more distraught and unconscious of his surroundings; and when the singing ceases he behaves in a strange manner, which strikes the attendant crowd with awe, starting suddenly and making strange clucking noises. Then he produces the tube mentioned above, and pressing one end upon the skin of the part indicated by the patient as the seat of the pain, he sucks strongly, and, presently withdrawing it, he blows out of it on to his palm a small black pellet, which moves mysteriously upon his hand as he exhibits it to the patient and his friends as the cause of the pain; and if the patient has complained of more than one seat of pain, the operation is repeated. It only remains for the DAYONG to return gradually with some violent gestures and contortions to his normal state, and to receive his fee, which properly consists of the sword used by him in the ceremony, and a live fowl. The whole procedure is very well adapted to secure therapeutic effects by suggestion. The singing and the atmosphere of awe engendered by the DAYONG'S reputation and his uncanny behaviour prepare the patient, the suction applied through the tube gives him the impression that something is being drawn through his skin, and the skilful production of the mysterious black pellet completes the suggestive process, under the influence of which, no doubt, many an ache or pain has suddenly disappeared. On one occasion, one of us being a little indisposed in a Klemantan house, we made an opportunity to examine the methods of the DAYONG a little more closely than is usually possible, by inviting one to undertake the extraction of his pains. We were then able to realise more vividly the suggestive force of the procedure, and to see that the black pellets were bits of dark beeswax which were carried upon the finger-nails of the DAYONG, and surreptitiously introduced by him into his mouth as they were required for exhibition after being blown through the tube; we could see also that the mysterious movements of the pellets upon his palm were produced by the help of short fine hairs protruding from it. It seems impossible to deny the presence of a certain element of fraud in this procedure, but we think that it would be hasty and uncharitable to assert that the DAYONG'S attitude is wholly one of fraud; we must remember that our most orthodox medical practitioners accord a legitimate place in their armamentarium to MISTURA RUBRA (solution of burnt sugar) and to similar aids whose operation is purely suggestive.

Most of the coastwise tribes seek to drive away epidemic disease by the following procedure: — One or more rough human images are carved from the pith of the sago palm and placed on a small raft or boat, or full-rigged Malay ship, together with rice and other food carefully prepared. The boat is decorated with ribbons of the leaves and with the blossoms of the areca palm, and allowed to float out to sea with the ebb-tide in the belief or hope that it will carry the sickness with it.

Among the Ibans, if a man has deceived people in a serious matter by means of a malicious lie, and if the untruth is discovered, one of the deceived party takes a stick and throws it down at some spot by which people are constantly passing, saying in the presence of others, "Let any one who does not add to this liar's heap (TUGONG BULA) suffer from pains in the head." Then others do likewise, and the nature of the growing heap becoming known, every passer-by throws a stick upon it lest he should suffer pains. In this way the heap grows until it attains a large size, in some cases that of a small haystack, and, being known by the name of the liar, is a cause of great shame to him.

When any man has his hair cut or shaved, he sees that the hair cut off is burnt or otherwise carefully disposed of. This is common to all the Borneans. It would seem that this is not prompted by fear of any definite harm, nor is there, so far as we know, any recognised way of using the hair cut off to work injury to its former owner. The custom seems rather to be due to the fact that shields and swords are decorated with the hair of enemies by Kenyahs and others; therefore it is felt that to use a man's hair for this purpose is almost equivalent to taking his head; and it is well to guard against this possibility. No doubt also it is vaguely felt that if the hair of one's head should come into the possession of any other person, that person would acquire some indefinable power over one.

Magical practices for the injury of enemies and rivals are more various and frequent among the coastwise Klemantans, especially the Bisayas, Kadayans, and Malanaus. It is probable that they have learnt much of this from the Malays. One variety is to hang up at the edge of a PADI field a yam or other root covered with projecting spikes of bamboo cane. This is done openly to spoil the crop.

Another trick is to tie under a bench in the boat of one's enemy a pebble, generally of quartz. This is supposed



to make the boat so heavy that it can only travel very slowly.

#### Charms

These practices involve the application of charms. Charms are extensively used by all the peoples, least so by Kayans. In every house is at least one bundle of charms, known as SIAP AIOH by the Kenyahs, by whom more importance is attached to it than by any of the other tribes. This bundle, which is the property of the whole household or village, generally contains hair taken from the heads that hang in the gallery; a crocodile's tooth; the blades of a few knives that have been used in special ceremonies; a few crystals or pebbles of strange shapes; pig's teeth of unusual shape (of both wild and domestic pig); feathers of a fowl (these seem to be substitutes for Bali Flaki's feathers, which they would hardly dare to touch); stone axe-heads called the teeth of Balingo; [156] and ISANG, I.E. palm leaves that have been put to ceremonial use (Fig. 80).

The whole bundle, blackened with the smoke and dust of years, hangs in the gallery over the principal hearth beside the heads, usually in a widemeshed basket. It constitutes the most precious possession of the household, being of even greater value than the heads. No one willingly touches or handles the SIAP, not even the chief. And when it becomes necessary to touch the bundle, as in transferring it to a new house, some old man is specially told off for the duty; he who touches it brings upon himself the risk of death, for it is very PARIT to touch it, I.E. strongly against custom and therefore dangerous. [157] Its function seems to be to bring luck or prosperity of all kinds to the house; without it nothing would prosper, especially in warfare.

Many individuals keep a small private bunch of SIAP, made up of various small objects, of unusual forms, generally without any human hair (Fig. 81). These are generally obtained through dreams. A man dreams that something of value is to be given him, and then, if on waking his eye falls upon a crystal of quartz, or any other slightly peculiar object, he takes it and hangs it above his sleeping-place; when going to bed he addresses it, saying that he wants a dream favourable to any business he may have in hand. If such a dream comes to him, the thing becomes SIAP; but if his dreams are inauspicious, the object is rejected. Since no one can come in contact with another man's SIAP without risk of injury, the inconvenience occasioned by multiplication of SIAP bundles puts a limit to their number. Nevertheless a man who possesses private SIAP will carry it with him attached to the sheath of his sword, and special hooks are provided in most houses for the hanging up of such swords (Fig. 82).

There are many instances of SIAP of specialised function. A man specially devoted to hunting with the blowpipe will have a special blow-pipe SIAP tied to his quiver (this is especially common among Punans). He will dip this SIAP in the blood of every animal he kills, so that it becomes thickly encrusted. This is thought to increase or preserve its virtue.

Another special kind of SIAP is that which ensures a man against hurt from firearms, through causing any gun aimed at him to miss fire.

The Ibans use personal charms which they call PENGAROH; but in accordance with their more individualistic disposition, they have no important charm common to the whole household corresponding to the household SIAP of the other peoples. The objects composing the PENGAROH are an assortment even more varied and fantastic than the SIAP of other peoples. In many cases they are carried with small china pots of oil, which are used to rub on the body as a universal remedy.

A curious object to be occasionally seen in some Sea Dayak houses is the empugau. It is a blackened bundle hung in a basket among the heads above the hearth. It is covered with the smoke and soot of ages, and though it is generally claimed as the property of some one man who has inherited it from his forefathers, even he knows nothing of its history and composition, and is unwilling to examine it closely. It is regarded by the Ibans as the head of some half-human monster. On careful examination of several specimens we have found the EMPUGAU to consist of a large cocoanut in its husk, tricked out with a rude face mask having part of the fibrous husk combed out to look like hair. The Ibans regard it with some awe, and it seems probable that it has formerly played some part in magical procedures.

#### Love Charms

Love charms are used by most of the peoples, though the Kayans and Kenyahs are exceptions, since they prefer to rely chiefly upon the power of music and personal attractions. These charms are in almost all cases strongly odorous substances. The Iban youth strings together a necklace of strongly scented seed known as BUAH BALONG. This he generally carries about with him, and, when his inclination is directed towards some fair one, he places it under her pillow, or endeavours to persuade her to wear it about her neck. If she accepts it, he reckons

her half won.

Klemantans, among whom love charms go by the generic name SANGKIL, make use of a variety of charms, of which one of the most used is a scented oil that they contrive to smuggle on to the garments or other personal property of the woman.

Those that have had much contact with Malays make use of pieces of paper on which they scrawl certain conventional patterns.

Charms are used by Ibans to ensure success in trapping. The trapper carries a stick one end of which is carved to represent the human form (Fig. 83). He uses this to measure the appropriate height of the traps set for animals of different species.

All the peoples observe a large number of restrictions in regard to contact with objects, especially articles of food. Some of these are mentioned in other chapters. Here we notice a few typical instances. In Chapter XV. we related that each of the peoples avoid certain animals; in some cases they avoid not only killing or touching these animals, but also even very remote relations with them: as, for example, taking food from a vessel in which their flesh has been cooked on some previous occasion; coming within the range of the odour of the object; coming into a house in which there is any part of such an animal.

The evil resulting from breach of any such prohibitions generally takes the form of wasting sickness with pains in the head, chronic cough, dysentery, or spitting of blood. When a Kenyah has knowingly for any reason, or unintentionally, come in contact with any one of the forbidden objects, or if he finds himself suffering from any of these things, and therefore suspects that he has unwittingly come under their influence, he subjects himself to a process of purification. At break of day he descends, with other members of his family, to the brink of the river provided with a chicken, a sword-blade, two frayed sticks, and a length of spiky vine known as ATAT. This latter is bent into the form of a ring, within which he takes his stand and awaits the appearance of Isit (the spider hunter — one of the omen-birds). He calls it by name, Bali Isit; and as soon as Isit calls in reply, he pours out a long-winded address, charging him to convey to Bali Penyalong his prayer for recovery or protection. Then he snips off the head of the chicken, and wipes some of its blood on the frayed sticks and on the ring. The ring, with the chicken and the frayed sticks, are then lifted above his head by his attendants, and water is poured upon them from a bamboo, so that it drips from them on to his head. Eight times the ring is lifted up, and each time the pouring out of the water is repeated. Then, standing on the blade of the sword, he again addresses the omen-bird as before. This completes the rite, which is known as LEMAWA.

A similar rite of purification is practised by most of the other peoples. In some cases the principal feature of the rite of purification is being spat upon by the chief.

It may be broadly said that all these peoples are constantly on the alert to provide against unknown dangers; that, having no definite theories of causation, they are apt to accept every hint of danger or hurtful influence suggested by the attributes and relations of things, and to seek to avoid these influences or to ward them off or counteract them by every means that in any way suggests itself to their minds as possibly efficacious.

Although the Kayans regard a madman as possessed by an evil spirit, they seem to have no traditional methods of casting out the spirit; but some of the Klemantans practise a rite of exorcism; this varies in detail from tribe to tribe, and attains the greatest elaboration among the Malanaus. The rite is known as BAYOH, and bears a general resemblance to the corresponding Malay rite known as BERHANTU. The Malanaus are Klemantans of the coast regions of Sarawak, most of whom have recently become converted to Islam, while all of them have been much influenced by contact with Malays. The following account is reproduced from a paper published by one of us (C. H.) in the REVIEW OF THE FAR EAST (Feb. 1907), to the editor of which we are indebted for permission to make use of the paper: —

The ceremony of casting out evil spirits is of frequent occurrence among Malanaus, and the noise of gongs and drums throughout the night, lasting every night for sometimes a whole week, cannot fail to impress even a casual observer.

The natives of Niah, who are Malanaus, believe in a multitude of spirits, good and bad, great and small, important and of little account. At the head of these is Ula Gemilang, the sea divinity, a power who works for the good of man.[158] Adum Girang is another spirit of the sea, as also is Raja Duan, who has power over the sun, a spirit who is distinguished, when he appears in human form, by his white head-cloth. Majau is said to be pre-eminently rich. Aiar Urai Arang is said to be a small child whose mother is Aiar. Besides these there are

other powerful spirits of the sea, the land, the up-river country, and so forth, and each is attended by innumerable slaves and attendants of ghostly kind; they have influence of many kinds over the dwellers in this world, some for good, others very much for evil. Madness is caused by various evil spirits throwing themselves into mortals, ghosts with red eyes which flash like lightning. The "amok" devil which comes from the swamp, differs from those which drive people to commit suicide --- these again being quite distinct from those which cause merely harmless lunacy.

It not infrequently happens that when a woman (or more rarely a man) is insane or is very ill, she is urged to admit that a devil has possessed her, and to become a medicine woman. By this means she becomes well of her complaint, and at the same time acquires the power of helping others to cast out devils. But she is not able of her own accord to determine whether she shall become a medicine woman or not. For three nights she is taken through the ceremony of BAYOH, afterwards to be described, without a rattan swing, and then for three nights with the swing. If the indications are favourable, some three weeks are allowed to elapse before she undergoes the final test of five nights with the swing. The first BAYOH is to satisfy the people, the second to appease the demon; and if her malady is cured by the eleven nights of artificial hysteria, she is considered to have been accepted both by men and spirits in her new role of exorciser.

As one woman expressed it, she is now "in with the demons." Even then, however, it does not follow that she is able to see when an evil spirit has ceased to possess a person. One old female, who had worked at BAYOH for fifteen years, admitted that if a devil went into herself she could turn it out, but only a more powerful woman than herself could turn devils out of others.

Two forms of BAYOH are known to the people of Niah, but it is only with the BAYOH SADONG that there is any need to deal here. The other form is used by the Punans, or mixed Punans and Malanaus. If it is supposed that some illness is due to possession by an evil spirit, it is decided to call the medicine women and get the unwelcome visitant to depart, though it is not considered possible in all cases to turn a demon out of his mortal abode. Offerings of eggs and fowls to the good spirits having proved fruitless, a day is fixed for the BAYOH, preferably shortly after a good harvest, and the household begins its preparations for the occasion. As powerful spirits are to be invited to the house, the room where they are to appear is decked with a profusion of ornaments suited to such exalted guests. Great tassels of white shavings are hung upon the walls, a white cloth adorned with the blossoms of the areca palm hides the rafters, and these graceful inflorescences are spread out fanwise over the doors and among the shavings. In one corner a hollow cone of areca blossoms and shavings spread over a framework of rattan is suspended from a rafter; and a model of a ship or raft is placed just outside an open window. As the function takes place at night, candles of beeswax are set about to give light. At the appointed time brass dishes are put on the floor with rice of many colours --- yellow, red, and blue --- spread in patterns of crocodiles; popcorns of rice and maize, water, and washing utensils, boxes of betel ready for chewing, tobacco, and cigarettes, to appease the varied appetites of the spirits invoked. Just after sundown the neighbours troop in and settle themselves round the room, the ill-mannered pushing themselves in front. Certain of the villagers agree to form the band. Soon the house is full of people, boys and old men contentedly chewing and smoking, women retiring to darker parts of the room to gossip. A person of importance will be received with some show of civility, but without any definite ceremony. Arabian incense, KAMANYAN, which is used nowadays because the native GARU has too high a value for export to be consumed at home, disperses a not unpleasant smell through the gathering. Then the fun begins, gongs and drums are struck, and the strains of music sound through the village. With intervals of a quarter of an hour every two hours, the monotonous melody proceeds until seven the next morning, to be resumed, in all probability, the next night for another twelve hours, and perhaps maintained night after night for a whole week.

The medicine women --- one, two, or three, rarely four in number --- have collected in the middle of the room. Generally experienced by years of performing, they are often too old to be attractive, despite the gorgeous raiment with which they conceal their aged frames and the hawkbells which jingle as they move. At first they collect round the earthenware censers to warm their hands. They then begin to step with the music and wave their arms, hissing loudly through their teeth the while, and occasionally breaking into a whistle. After a time they sit down and nod this way and that to the music, as though engaged in training the muscles of the neck. But the drums and gongs go faster, till the long hair of the woman flies round with her head. The whistling is varied by a chant, SADONG, in an ancient language now barely understood.

"Why do you speak? Why do you SADONG? Why are you such a long time? As long as it takes a pinang (areca) to become old? The fruit of the cocoanut has had time to reach maturity and drop. Come to this country below the heavens. What do you wish? What is your desire? I have come to heal the sick one who lies on the floor, feeble and unable to rise, thin and shrivelled like a floating log. Have pity from your heart and prevent my soul from parting from my skin and my bones from failing away. This sickness is very severe and I am unable to contend against it."

One of the women goes to the patient, who, clad in black, sits alone on a mat, and brings her a pinang blossom to hold, covering her head with a cloth. The unfortunate being is then brought to the hollow cone of shavings and seated within it; it is then whirled round till the white shreds rise like a ballet dancer's skirt. Gradually the sick person is worked up to a frenzy, and, keeping time with the music, the medicine women sway about and wag their heads. So the proceedings go on, with weird fantastic dancing, nodding, howling, whistling, chanting, for all the hours of the tropical night. Then the medicine women are whirled round in the cone, and one by one they fall into a faint, to be recovered by fanning with the pinang blossom. They dance about and brush against the onlookers as though unable to control their movements, and are only kept at a distance by finding handfuls of rice flung in their faces. The point of giddiness and hysteria eventually reached can only be compared with certain stages of drunkenness.

The outsider will find it difficult to detect much method in the madness, but on more sober occasions the performers can offer intelligible explanations of their behaviour. The account given by an old medicine woman at Niah, and confirmed by the man who conducts the ceremonies at the same village, shows that the part taken by the spirits is quite as definite as the performance of the exorcisers. Attracted by the music, the followers of the chief evil spirits gather round the house when the BAYOH has begun, and hunt about. These little demons ask the chief medicine woman, "Why have you called us?" She replies, "Tell your master that I have called you because there is a person here sick." They then go back and fetch the more powerful spirit whom they serve. This demon comes up from the sea to the JONG, a small ship or raft that stands behind the house (Fig. 84), and finds his way up the rope ladder. He asks the BAYOH woman, "Why have you called me, mother?" She answers, "I have called you because there is a sick person here. You can help him! See whether you can help him or not." If the demon finds the sickness beyond his power to cure, he says, "I cannot help you; get some one else"; and the next night another one is invoked, until the evil spirit is cast out of the patient. If for seven nights the attempt is made in vain, the BAYOH is stopped and medicines are tried again, but with little hope that they will do much good. One of the BAYOHS I saw at Niah was on behalf of a slightly mad woman, who became very violent during the performance. She was said to be mad because she had become a Mohammedan, and it was explained that the Malanau demons had no power over the evil spirits of Islam. The poor woman was consequently put into stocks in her own room, and not long afterwards recovered.

When a big spirit comes into one of the medicine women, as they say, like a flash she feels its presence, but does not see its form. If it agrees to help, the woman goes on with the regular BAYOH, and soon feels confident that she is able to make the patient well. She asks for rice and other food, and spirit made from fruit, which she eats and drinks to gratify the demon within her. She calls upon the people to see that the viands are good, but not from any selfish motive, for it is said that she is not aware that she is eating at all. The coloured rice, which has been prepared, is the spirit's share, and eggs are also given. The demon invoked to help calls out to the evil spirit in possession of the sick person, "You stay in this craft whilst I sit here." "If you don't wish to stay here you can go to the woods, or your former abode." The evil spirit then goes from the patient into the basket prepared for his reception, and is then induced or ordered to depart by the demon in the medicine woman. What remains of the food set apart for the spirit is scattered along the river. The BAYOH is stopped, and thanksgiving offerings are floated out to sea that the exertions of the supernatural powers may not have been in vain, or these gifts may be taken into the jungle, where the hollow cone and raft are also placed or hung from a tree.

The medicine women work for a fee, and it is likely enough that the length of the BAYOH is influenced to some extent by their pay. Sometimes the ceremony is most gorgeous. A rattan swing, covered with a beautiful cloth, is provided for the women and the patient to swing in, with a platform near at hand to receive the evil spirit. Sometimes Ula Gemilang himself is invoked. On these occasions the expenditure is profuse. A box is placed in the middle of the room with a handsome covering. The walk up the floor is covered with cloth of gold thread. There are seven candles in seven brass sticks, seven betel stands, and seven men carrying spears. When

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the god arrives, seven people carry the umbrella over his head. If every thing is not perfectly satisfactory in his judgment, he demands through the medicine woman whose body he has occupied some expensive gift, and if this is refused she may fall in a dead faint. Rice is thrown on her and she is fanned with the pinang blossoms, but the women who attend to her only share her fate and also become senseless. Eventually they recover, but there is now but little hope for the patient, for Gemilang is angry. In a despairing mood the BAYOH women then seek help from lesser powers.

Needless to say, the women bear out their part of the pantomime with great skill, becoming "possessed" at the proper time, snatching at the sick person's head as though to catch the evil spirit, and so forth. It is probable that in some cases the ceremony works a cure by suggestion. In any case the villagers have not too many occasions for social gatherings and feasts, and since those who hold BAYOHS must offer a good deal of hospitality to their neighbours, such meetings in a village are exceedingly popular with all except those who wish to go to sleep.

## CHAPTER 17. Myths, Legends, and Stories

Among all the peoples of Borneo a number of myths are handed on from generation to generation by word of mouth. These are related again and again by those who make themselves reputations as story-tellers, especially the old men and women; and the people are never tired of hearing them repeated, as they sit in groups about their hearths between supper and bed-time, and especially when camping in the jungle. The myths vary considerably in the mouths of different story-tellers, especially of those that live in widely separated districts; for the myths commonly have a certain amount of local colouring. Few or none of the myths are common to all the peoples; but those of any one people are generally known in more or less authentic form to their neighbours.

Although many of the myths deal with such subjects as the creation of the world, of man, of animals and plants, the discovery of fire and agriculture, subjects of which the mythology has been incorporated in the religious teachings of the classical and Christian worlds, the mythology of these peoples has little relation to their religion. The gods figure but little in the myths, and the myths are related with little or no religious feeling, no sense of awe, and very little sense of obligation to hand them on unchanged. They are related in much the same spirit and on the same occasions as the animal stories, of which also the people are fond, and they may be said to be sustained by the purely aesthetic or literary motive, rather than the religious or scientific motives. In fact it is not possible to draw any sharp line between myths and fables. If it is asked, Do the people believe the myths? no clear answer can be given; for few of the myths have any direct bearing upon practical life, and therefore belief in them is not brought to the test of action, the only test that can reveal the reality of belief, or indeed differentiate belief from merely unreflective acceptance of a story. Where such practical bearing is not altogether wanting, we commonly see conduct regulated in conformity with the myth or story, as in the case of the story of the bat carrying to the creatures in the river the news of the intention of the people to poison the water.

A certain number of the Bornean myths and legends have been published in Mr. Ling Roth's book and elsewhere, especially those of the Ibans. We have chosen for reproduction some representative specimens that have not hitherto appeared in well-known publications. A few stories that properly belong to this chapter are scattered in other parts of this book.

We give first in a condensed form the substance of a long rambling creation-myth current among all branches of the Kayan people. This myth is sung in rhymed blank verse, a fact which is partly responsible for the wealth of names occurring in it.

In the beginning there was a barren rock. On this the rains fell and gave rise to moss, and the worms, aided by the dung-beetles, made soil by their castings. Then a sword handle (HAUP MALAT) came down from the sun[159] and became a large tree. From the moon came a creeper, which hanging from the tree became mated with it through the action of the wind.[160] From this union were born KALUBAN GAI and KALUBI ANGAI, the first human beings, male and female. These were incomplete, lacking the legs and lower half of their trunks, so that their entrails hung loose and exposed. Leaves falling from the tree became the various species of birds and winged insects, and from the fallen fruits sprang the fourfooted beasts. Resin, oozing from the trunk of the tree, gave rise to the domestic pig and fowl, two species which are distinguished by their understanding of matters that remain hidden from all others, even from human beings. The first incomplete human beings produced PENGOK NGAI and KATIRA MUREI; the latter bore a son, BATANG UTA TATAI, who married AJAI AVAI and begot SIJAU LAHO, ODING LAHANG, PABALAN, PLIBAN, and TOKONG, who became the progenitors of the various existing peoples. ODING LAKANG is claimed as their ancestor by the Kayans, and also by the Kenyahs and some of the Klemantan tribes.

TOKONG is claimed as ancestor by the Sebops (a tribe of Klemantans) and by the Punans. The former attribute to him the introduction of head hunting. The story goes that once upon a time, when TOKONG and his people were preparing to attack a village, he was addressed by the frog, who called out, "WONG KA KOK, TETAK BATOK." This fairly represents the cry of this species of frog (BUFO); and TETAK BATOK in the Sebop language means "cut through the neck." At first the people, who hitherto had taken only the hair of their

enemies to adorn their shields, scoffed at this advice; but the frog assured them that the taking of heads would bring them prosperity of every kind, and demonstrated the procedure he advised by decapitating a small frog. TOKONG therefore determined to follow the frog's advice and carried away the heads of his enemies; this was followed immediately by increased prosperity. As the party returned home and passed through their fields the PADI grew very rapidly. As they entered the fields the PADI was only up to their knees, but before they had passed through it was full-grown with full ears. As they approached the house their relatives came to meet them, rejoicing over various pieces of good fortune that had befallen them. The words of the frog thus came true, and Tokong and his people continued to follow the new practice, and from them it was learned by others.

Although the help of the stars is not needed by the Borneans in directing their course when travelling, since all but very short journeys are made on the rivers, most of them are familiar with the principal constellations, and name them in accordance with the resemblances they discover to men, animals, and other objects. Some of the tribes determine the arrival of the season for sowing PADI by the observation of the stars. Thus the LONG KIPUTS (Klemantans) name the great square of Pegasus PALAI, the PADI storehouse (these houses are generally square); the Pleiades they call a well; and the constellation of which Aldebaran is a member they call a pig's jaw. They measure the altitude of a star by filling a tall bamboo vessel with water, inclining it until it points directly to the star, and then setting it upright again, and measuring the height at which the surface of the water remaining in the vessel stands above its floor. Orion is interpreted as the figure of a man, LAFAANG, in much the same way as by Europeans; but his left arm is thought to be wanting. They tell the following story about LAFAANG, who of course is regarded as of their own tribe.

#### The Story of LAFAANG

The daughter of PALAI (the constellation Pegasus) fell in love with a Long Kiput youth, LAFAANG by name, and invited him to ascend to the heavens, warning him at the same time that the customs in her celestial home were very different from those of earth. The girl was very beautiful, and LAFAANG was not slow to find his way to her father's house. PALAI, surprised to see this mortal visitor, enquired of his daughter, "Who is this man, and why does he come here?" "It is the man I wish to wed," replied the girl. The kind-hearted father told her to give her lover food, and consented to the realisation of her hopes. So LAFAANG took up his abode in the house of PALAI and was wedded to his daughter. But in spite of repeated instructions, LAFAANG found it very difficult to conform to the customs of his adopted country. He put his food into his mouth with his fingers instead of using a needle for the purpose, and by doing so distressed his wife, who chid him for his disobedience to her instructions. On the morrow of his arrival he was invited to clear a patch of jungle for a PADI field; and his wife told him that, in order to fell a tree, he was merely to lay the axe she gave him at the foot of the tree, which would forthwith fall to the ground. But habit was too strong to be controlled, and, when LAFAANG set his hand to the task, he fell to chopping at the tree. But though he chopped with might and main he made no impression, and his gentle spouse was horrified to see the crudeness of his methods. On the next day he was told to watch PALAI at work felling the trees. Squatting in the jungle he saw how the great trees fell when PALAI merely laid the blade of the axe at the foot of each one. This spectacle filled LAFAANG with terror and he would have ran away, but that his wife reproached him for cowardice. On the following day he set to work again; and once more forgetting his lesson, he began to chop at the stems of the trees. This gross breach of custom was punished by the fall of a tree from the patch of jungle hard by that on which PALAI was at work; for the tree in falling cut off LAFAANG'S left arm. Disgusted by these disagreeable incidents and by the awkward appearance of his wife, who was now far advanced in pregnancy, LAFAANG made up his mind to return to his own people. His wife reproached him for his intention; but, when she could not alter his determination, she gave him sugar-cane tops and banana roots, previously unknown to men, and let him down to earth by means of a long creeper. Before he reached the ground he heard the cry of his new-born child, and begged to be allowed to go back to see him. But his entreaties were unavailing, and weeping bitterly, he alighted on the earth at TIKAN ORUM (a spot in the upper Baram district). Still his disobedience was not overcome; for, although he had been told to plant the sugar-cane and banana by merely throwing them on the ground, he planted them carefully in the soil; and to this day a tall coarse grass (BRU) grows on the spot. Nevertheless some sugar-cane and banana plants grew up; but they were of an inferior quality, and such they have remained wherever they have spread in this world. LAFAANG died among his own people on earth, but the bright constellation that bears his name and shape still moves across the heavens, reminding men of his journey to the world above the sky and of the misfortunes he

suffered there.[161]

#### The Story of USAI

The following myth, current under several forms among the Klemantans, accounts for a number of the geographical features of the Baram district, in which it was told us. The story was evoked from an old man of the Long Kiputs by a question as to his views about the nature of the stars. He explained that the stars are holes in the sky made by the roots of trees in the world above the sky projecting through the floor of that world. At one time, he explained, the sky was close to the earth, but one day USAI, a giant, when working sago with a wooden mallet accidentally struck his mallet against the sky; since which time the sky has been far up out of the reach of man. Our informant, warming up with the excitement of the recital, went on to give us the following history of USAI:

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USAI was the brother of the guardian of the shades of men. His wife desired to have a large prawn that lived in the Baram river; so USAI built a dam across the river at LUBOK SUAN (a spot where the river is about 250 yards in width) and baled out the water below it, seizing the crocodiles with his fingers and whisking them out on to the bank. While this operation was in progress, the dam gave way; and USAI'S wife was drowned in the sudden rush of water. In vain he sought for his wife, weeping bitterly. Disconsolately he waded down the river. At the mouth of the PELUTAN he wept anew, throwing aside the crocodiles as he explored the bed of the river. At LONG SALAI he found his wife's coat and wept again. At LONG LAMA he found his wife's waist-cloth and gave up hope, and at TAMALA he clucked like a hen, so great was his grief. Still he went on wading down the river. The water, which at LONG PLUSAN was only just above his ankles, reached his middle at the mouth of the TUTAU, and covered all his body at the place where the Tinjar (the largest tributary) flows into the Baram. At the mouth of the ADOI he wailed aloud, "ADOI, ADOI!" (a sorrowful cry in common use, nearly the equivalent of our Alas!). He began to shiver with cold, but at the mouth of the BAKONG he wept again. When he reached LUBOK KAJAMAN he was out of his depth (this is a part known to be very deep) and colder than ever; but he kept on, and presently the water reached only to his belly, and when he reached the sea it came only to his knees. (There is a shallow bar at the river mouth.) On seeing the boundless ocean, USAI gave up the search and strode down the coast to Miri, where he lived on charcoal and ginger. (The belief is widely held that the people of Miri, formerly ate charcoal in large quantities.) The people of Miri seemed to him like maggots; and they, taking him to be a great tree, climbed up on him. When he brushed them off, he killed ten men with each sweep of his hand. The Miri people set to work to hew down this great tree, and blood poured from USAI'S foot as they worked. Then USAI spoke to them, asking them what sort of creatures they might be, and said, "Listen to my words. I am about to die. My brains are sago, my liver is tobacco. Where my head falls there the people will have much knowledge, where my feet lie will be the ignorant ones." Then, his legs being cut through, he fell with a mighty crash, his head falling towards the sea, his feet pointing up river. ("This accounts for the fact that white men and Chinese know so many things, while the people of Borneo are ignorant" said our informant; but this was probably his own comment.) The Miris, of whom a thousand were killed by the fall of USAI, have beautiful hair, because his head fell in their district; but the other people have only such hair as grew on USAI'S limbs. The mosquitoes that existed in the time of USAI were as big as fowls, and their bites were terribly painful. The people hewed them into small pieces, so that now they are the smallest of the animals; but their bite is still painful.

#### The Iban Story of Simpang Impang

The following story, which is an old favourite among the Ibans (Sea Dayaks) of the Batang Lupar, will serve to illustrate, with its many heterogeneous features, the myth-making faculty of this imitative and fun-loving people. It will be noticed that the story combines the characters of a creation-myth, an animal fable, and a fairy tale: —

Once upon a time some people were looking for edible vegetables in the jungle, when they came upon a huge python, which they took to be a log. Sitting upon it to cut up their vegetables, they by chance wounded it, and caused the python's blood to flow out. Recognising then the nature of their resting-place, the people cut up the python and began to cook its flesh. Then heavy rain began to fall, and it rained like anything for days and days, so that all the land was covered with water, and only the top of TIANG LAJU (the highest peak of the Batang Lupar district) stood out above the flood. All the people and animals were drowned except one woman, a dog, a rat, and a few other small animals, which climbed to the top of this mountain. The woman, seeking shelter from the rain,



noticed that the dog seemed to have found a warm place beneath a creeper. The creeper was swaying in the wind and rubbing against a tree, and thus was warmed by the friction. The woman, taking the hint, rubbed the creeper hard on a piece of wood, and so for the first time produced fire. Having no husband the woman took the creeper for her mate, and soon afterwards gave birth to a son, who was but one-half of a human being, having one arm, one leg, one eye, and so on. This child, SIMPANG IMPANG, whose only companions were the animals, often complained bitterly to his mother of his incompleteness. One day SIMPANG IMPANG discovered some PADI grain which the rat had hidden in a hole. He spread it out to dry on a leaf, which he put on top of a stump. On this the rat demanded the PADI back; and when SIMPANG IMPANG refused it, he grew very angry, and swore that he and all his race would always retaliate by taking the PADI of men whenever they could get at it. While they were disputing, SELULAT ANTU RIBUT, the wind-spirit, came by and scattered the PADI grains far and wide in the jungle. SIMPANG IMPANG looked round in anger and astonishment, and could perceive nothing but the noise of the wind. So he set out with some of his companions to get back his corn from the wind-spirit, or know the reason why. After wandering for some days he came to a tree on which were many birds; they picked off its buds as fast as the tree could push them out. SIMPANG IMPANG asked the tree to tell him the way to the house of the wind-spirit; and the tree said, "Oh, yes, he came this way just now, and his house is far away over there. When you come to it, please tell him I am tired of putting out my leaves to have them bitten off by these rascal birds, and that I want him to come and end my miserable life by blowing me down."

SIMPANG IMPANG went on and came to a lake, which said, "Whither are you going, friend?" And when he answered that he was going to find the wind-spirit, the lake complained that its outlet to the river was blocked with a lump of gold, and told him to get the wind-spirit to blow away the obstruction. SIMPANG IMPANG promised to put in a word for the lake, and, passing on, came to a cluster of sugar-canes and bananas. "Whither are you going, friend?" said they. "I'm going to the wind-spirit" he answered. "Oh! then, will you please ask him how it is we have no branches like other trees; we should like to have branches like them." [162] "Yes, I'll remember it," said SIMPANG IMPANG, and, passing on, he soon came to the home of the wind-spirit. There he heard a great noise of wind blowing, and the wind-spirit said, "What do you want here, SIMPANG IMPANG." He answered angrily that he had come to demand the PADI that the wind-spirit had carried away. "We'll settle the dispute by diving" said the wind-spirit, [163] and he dived into the water; but being only a bubble, he very soon popped up to the surface. Then SIMPANG IMPANG called on his companion the fish to dive for him; and when the windspirit saw that he had no chance of coming out the winner in this ordeal, he said, "No, this is not fair, we'll settle the matter by jumping," and he leapt right over the house. SIMPANG IMPANG called on the swift as his substitute, and the swift, rising from the ground, jumped right out of sight. Still the wind-spirit would not give in. "We'll have another test; let's see who can go through this blow-pipe"; and he went whistling through. Then SIMPANG IMPANG did not know what to do, for none of his companions seemed able to help him. But he had forgotten the ant, until a little squeaky voice called out, "I can do it"; and forthwith the ant crawled through the blow-pipe. Still the wind-spirit would not give in, and SIMPANG IMPANG was very angry, and seizing his father, the fire-drill, he set the windspirit's house on fire. Then at last the wind-spirit called out that he would make compensation for the PADI he had taken away. "But," said he, "I haven't any gongs or other things to pay you, so I'll make you a whole man with two arms and two legs and two eyes." SIMPANG IMPANG accepted the bargain, and was overjoyed to find himself a whole man. Then he remembered the messages he had brought from the tree and the lake, and the wind-spirit promised to do as he was asked. And then SIMPANG IMPANG put to him the question of the bamboo and of the banana plant; and the wind-spirit said, "They have no branches because human beings are always offending against custom; they often utter the names of their father-in-law and mother-in-law, and sometimes they walk before them in going through the jungle; that is why the bamboo and the banana have no branches."

Kenyah Fable of the Mouse-deer and the Tortoise

Animal fables are current among all the peoples of Borneo, and are frequently repeated and listened to with much enjoyment; some individuals who acquire the reputation of being good story-tellers are frequently called upon to practise their art. Closely allied with this enjoyment of fables is the practice of describing incidents of social or tribal intercourse in fables, parables, or allegories, which are made to suit the occasions and to point the appropriate moral.

Once upon a time PLANDOK (the tiny mouse-deer) and KELAP (the water-tortoise) went out together to

find fruit. They found a tree laden with ripe fruit close by a house. "I can't climb up that tree," said PLANDOK, "but I'll give you a leg up, and then you can get on to that branch." So he pushed up KELAP on to the lowermost branch. KELAP threw down all the fruit, but then didn't know how to get down, and called to PLANDOK for help. "Oh! get down anyway you like," said PLANDOK. "But I can't get down forwards and I can't get down backwards." "Then throw yourself down," said PLANDOK, and KELAP threw himself down and came to the ground with a great thud. The people in the house heard the sound and said, "There's a durian falling." Then PLANDOK began to divide the fruit into heaps. "This is for me and that's for you," he kept calling out; and every time he put some more fruit to KELAP'S heap, he shouted louder than before. "Hello," said the people in the house, "there's somebody dividing something," and they ran out to see what was going on. PLANDOK skipped away with his share of the fruit, and left KELAP to hide himself as best he could under the broad leaves of a Caladium plant. The people saw the tree stripped of its fruit, and KELAP'S tracks on the ground soon led to the discovery of his hidingplace. "Here's the thief," said the people, "let's put him in the fire." "Oh yes," said KELAP, "please put me in the fire; last time they put me in the fire they only half did the thing, and left one side quite untouched by the fire." [164] "Oh! that won't do," said the people, "let's squeeze him in the sugar-cane press." "Oh yes, please squeeze me in the press," said KELAP, "last time they put me in the press they only squeezed one side of me." [165] "Then that won't do either," they cried, "let's throw him into the river." "Oh! don't throw me into the river," said KELAP, and began to weep. So they threw him into the river. KELAP swam out to the middle of the river and, putting up his head above the surface, called out, "That's alright, this is my home." At this the people saw that he had got the better of them, and determined to turn the tables by poisoning the water with TUBA. [166] The bat overheard what they were saying, and at once flew off to KELAP, and advised him to get out of the river. "No, I shall stay here," said KELAP, "this is the safest place for me," and he went and stood quite still among the big stones in the shallow water.

Presently the people began to beat out the TUBA root on the stones, and one man, taking KELAP'S back for a stone, began to beat his TUBA upon it. Then KELAP made his back sink lower little by little, so that the water began to cover it. "Hello!" said the man, "the water's rising, it's no good trying to poison the river when the water's rising." So they went home.

#### The Kenyah Story of the BELIRA Fish

The BELIRA is a fish that has an extraordinary number of bones. The following story accounts for this exceptional number of bones and, in conjunction with the foregoing story, explains why Kenyahs, when proposing to poison the river with TUBA in order to take the fish, speak of their intentions only in parables.

The fish began to complain that they were so often caught by men who poisoned the river. So they decided they must have a DAYONG who could make rain for them [167] so as to prevent the poisoning of the water. They asked one fish after another to become a DAYONG; but all refused until they came to the BELIRA, who said he would do his best to become a DAYONG and to make rain for them, if each of the other fishes would give him a bone. They accepted the bargain and each gave him a bone, and that is why the BELIRA has so many bones.

#### The Story of the Stupid Boy

The following Klemantan story illustrates the taste of the people for the comic: —

One day SALEH and his father set out in their boat for their farm. "Look out for logs" (I.E. floating timber), said SALEH'S father. They had not gone very far when SALEH sings out, "I see some timber." "Where?" says his father. "Why, there on the bank," says SALEH, pointing to the jungle. "Oh! you silly," says his father, "go on." So they went on and landed, and the father, leaving SALEH to cook some rice in the large pot, began to cut down some trees. Presently he came back and found SALEH with the pot upside down over the fire, and nothing cooked. "What are you at?" cries the father. "Well," says SALEH, "I put the pot over the fire as you told me to do, but when I poured the water on it, it all ran into the fire and put it out." "You stupid boy, you should have put the pot on the other way up." But you didn't tell me so," says SALEH.

The father had chipped his axe, so he sends SALEH home to fetch another. SALEH sets out gaily singing, the blade of the axe lying in the bow of the boat. Soon the boat strikes a snag and overboard goes the axe-blade. "Oh, bother!" says SALEH, "but never mind, I'll mark the place," and he whips out his knife and cuts a notch in the gunwale of the boat at the spot where the axe fell in. Arriving at the landing stage before his father's house, he begins to dive into the water to find the lost axe-head, and continues vainly seeking it till his mother comes out to ask what he is doing. "I'm looking for the axe that fell into the water just at this notch, as I was coming down

river," says SALEH. "Oh! you are a stupid," says his mother, and fetches him a new axe. SALEH goes back to his father, who has found a fruit tree. He tells SALEH to gather the fruit in his basket while he goes on felling trees. Presently the father comes back and finds SALEH fastened with his back to the tree by the shoulder-basket, which he has put right round its stem, and his legs going up and down. "Hello! what ARE you up to now?" says the father. "Why, I'm carrying away the whole tree to save trouble," says SALEH, "and I'm watching the clouds up there to see how fast I'm walking with this tree on my back."

A Story with a Moral

We conclude this chapter with an example of a fable which points a moral. It is told by the Barawans of their neighbours, the Sebops (both are Klemantan tribes), who, they say, put off every task till the morrow.

One wet night KRA, the monkey, and RAONG, the toad, sat under a log complaining of the cold. "KR-R-R-H" went KRA, and "Hoot-toot-toot" went the toad. They agreed that next day they would cut down a KUMUT tree and make themselves a coat of its bark. In the morning the sun shone bright and warm, and KRA gambolled in the tree-tops, while RAONG climbed on the log and basked in the sunlight. Presently down comes KRA and sings out, "Hello, mate! How are you getting on?" "Oh! nicely," says RAONG. "Well, how about that coat we were going to make?" says KRA. "Oh! bother the coat," says RAONG, "we'll make it to-morrow; I'm jolly warm now." So they enjoyed the sunshine all day long. But, when night fell, it began to rain again, and again they sat under the log complaining of the cold. "KR-R-R-H," went KRA, and "Hoot-toot-toot" went RAONG. And again they agreed that they must cut down the KUMUT tree and make themselves a coat of its bark. But in the morning the sun was shining again warm and bright; and again KRA gambolled in the tree-tops and RAONG sat basking in the sunshine; and again RAONG, said, "Oh! bother the coat, we'll make it tomorrow." And every day it was the same, and so to this day KRA and RAONG sit out in the rain complaining of the cold, and crying "KR-R-R-H" and "Hoot-toot-toot."

## CHAPTER 18. Childhood and Youth of a Kayan

From the time that the parents of a Kayan become aware of his existence they faithfully observe, without intermission until his appearance in the world, certain tabus. Or, in their own language, they are MALAN and certain things and acts are LALI for them. The belief that the child will resemble in some degree the things which arrest the glance of his mother while she carries him (LEMALI) is unquestioningly held and acted upon; hence the expectant woman seeks to avoid seeing all disagreeable and uncanny objects, more especially the Maias and the long-nosed monkey; she observes also the tabus imposed upon sick women in general, and besides these a number of other tabus peculiar to her condition, most of which apply to acts or situations which may symbolise any difficulty in delivery of the child; for example, she must not tie knots, she must not thrust her hand into any narrow hole to pull anything out. The tabus of the latter class are observed by the husband even more strictly, if possible, than by the wife. The woman must also avoid certain kinds of flesh and fish. It frequently happens that the woman begins to crave to eat a peculiar soapy earth (BATU KRAP), and this is generally supplied to her.

The woman will also take positive measures to ensure the prosperous course of her pregnancy and delivery. At the quickening she sacrifices a young pig and charges it to convey her prayer to Doh Tenangan; and on the occurrence of any untoward incident, such as a fall, the prayer and sacrifice are repeated. The carcasses of the victims are stuck upon poles before the house near her door, and the inevitable feathered sticks, smeared with blood, are thrust behind a roof beam in the gallery opposite her door.

In every Kayan house are certain elderly women (not the DAYONGS) who have a reputation for special knowledge and skill in all matters connected with pregnancy and childbirth. One of these is called in at an early stage; she makes from time to time a careful examination of the patient's abdomen and professes to secure the best position of the child.

She has also a number of charms, which she hangs in the woman's room, and various unguents, which she applies externally. But all these procedures are surrounded by a veil of secrecy which we have failed to penetrate. And, in fact, all information in regard to the processes of childbirth is difficult to obtain, for all Kayans are very reticent on the matter, even among themselves.

In all other respects the pregnant woman follows her ordinary mode of life until the pains of labour begin. Then she is attended by the wise woman and several elderly relatives or friends. She sits in her room which is LALI to all but her attendants and her husband; and she is hidden from the latter by a screen of mats. During the pains she grasps and pulls on a cloth fixed to a rafter above and before her. The pains seem to be severe, since the woman generally groans and cries out; but the duration of labour is commonly brief, perhaps two or three hours only. The attendants' great anxiety is lest the child should go upward, and to prevent this they tie a cloth very tightly round the patient about the upper part of her abdomen. During the pains two of them press down with great force upon the uterus, one from each side. The wise woman professes to accomplish version by external manipulation, if she judges that the feet are about to present. But we do not know whether her claim to so much skill is well founded. If the after-birth does not follow immediately upon the child, the attendants become very anxious; two of them lift up the patient, and, if it does not soon appear, an axe-head is tied to the cord in order to prevent its return within the body, and possibly that the weight may hasten its extrusion. We have no reason to suppose that any internal manipulation is attempted at this or any other stage of labour or of pregnancy. Immediately after delivery the cord is tied and cut across with a bamboo knife. If the child does not cry at once, its nostrils are tickled with a feather.

The after-birth is usually buried or merely thrown away. But if the child is born enclosed in the membranes (with a caul), they are dried and preserved by the mother. It is said that, when dried, it is pounded to a powder and mixed with medicines administered to the child in later years.

If labour is unusually difficult or prolonged, or if accidents happen, the news spreads quickly through the house; and, if the attendants begin to fear a fatal issue, the whole household is thrown into consternation, for death in childbirth is regarded with peculiar horror. All the men of the house, including the chief and boys, will flee

from the house, or, if it is night, they will clamber up among the beams of the roof and there hide in terror; and, if the worst happens, they remain there until the woman's corpse has been taken out of the house for burial. In such a case the burial is effected with the utmost despatch. Old men and women, who are indifferent to death, will undertake the work, and they expect a large fee.

The body, wrapped in a mat, is buried in a grave dug in the earth among the tombs, instead of being put in a coffin raised on a tall post; for the soul of the woman who dies in childbirth goes, with the souls of those who fall in battle, or die by violence of any kind, to Bawang Daha (the lake of blood).

If twins are born, one is chosen, generally the boy, if they are of different sexes. The other is got rid off by exposure in the jungle. The avowed motive for this practice (which, of course, is rapidly passing away under the influence of the European governments) is the desire to preserve the life of the survivor; for they hold that his chances of life are diminished not only by the necessity of dividing the mother's care and milk between the twins, if both survive, but also by the sympathetic bond which they believe to exist between twins, and which renders each of them liable to all the ills and misfortunes that befall the other; and to Kayans the loss of a child of some years of age is a calamity of the first magnitude, whereas the sacrifice of one of a pair of new-born twins is hardly felt.

At the moment the child is completely born, a TAWAK or a drum (according as it is male or female) is beaten in the gallery with a peculiar rhythm. All members of the household (I.E. all whose rooms are under the roof of the one long house, and who, therefore, are under the same omens and tabus) who are within the house at this moment have the right to a handful of salt from the parents of the child; and all members who are not under the roof at the moment are expected to make a present of some piece of iron to the child. This is an ancient custom, which is no longer strictly observed, and which seems to be undergoing a natural decay.

During the confinement of a woman, Kayans (more especially those of the upper Rejang) sometimes perform a dance which is supposed to facilitate delivery. It is commonly performed by a woman, a friend or relative of the labouring woman, who takes in her arms a bundle of cloth, which she handles like a baby while she dances, afterwards putting it into the cradle (HAVAT) in which a child is carried on the back. An old story relates the origin of this dance as follows. A widow died in childbirth, and the child was given to a woman who happened to be dancing at the time of its birth, and who afterwards became a very influential and prosperous person.

When the delivery has been normally accomplished and all goes well, the mother at once nurses the child; and a woman of the lower class may resume her lighter household duties within twenty-four hours. A woman of the upper class may remain recumbent for the most part of several days or even weeks. For seventeen days the mother wears threads tied round the thumbs and big toes, and during this time she is expected to avoid heavy labour, such as farm-work and the pounding of hadi. There seems to be no trace of any such custom as the COUVADE, though the father observes, like the mother, certain tabus during the early months and years of the child's life, with diminishing strictness as the child grows older. The child also is hedged about with tabus. The general aim of all these tabus seems to be to establish and maintain about the child a certain atmosphere (or, as they say, a certain odour)[168] in which alone it can thrive. Neither father nor mother will eat or touch anything whose properties are thought to be harmful or undesirable for the child, E.G. such things as the skin of the timid deer (see vol. ii. p. 72), or that of the tiger-cat; and the child himself is still more strictly preserved from such contacts. Further, nothing used by or about the child -- toys, garments, cradle, or beads -- must be lost, lent, sold, or otherwise allowed to pass out of the possession of the parents; though, if one child has thriven, its properties are preferred to all others for the use of a younger brother or sister. It is important also that no stranger shall handle or gaze too closely upon the child; and when it is put down to sleep in the parents' room, the mat or rude wooden cradle on which it lies is generally surrounded by a rough screen. The more influential the stranger, the more is his contact to be feared; for any such contact or notice may attract to the infant the unwelcome and probably injurious attentions of the TOH. For the same reason it is forbidden, or PARIT, to a child to lie down on the spot where a chief has been sitting or where he usually reposes. And it is a grave offence for a child to, jump over the legs of a reclining chief; but in this case the disrespect shown is probably the more important ground of the disapprobation incurred.

If any such contact has unwittingly occurred, or if, for example, a Kayan mother has consented to submit an ailing child to inspection by a European medical man, the danger incurred may be warded off by the gift from the stranger to the child of some small article of value. In a similar way the breach of other tabus, such as the entering of a room which is LALI, may be rendered innocuous.

The infant is carried by the mother almost continuously during the waking hours of its first year of life; it is generally suspended in a sling made of wood or of basket-work, resembling in shape the baby's swing familiar in our nurseries; the child sits on a semicircular piece of board, its legs dependent, its knees and belly against the mother's back, and its own back supported by the two vertical pieces of the cradle (see Pl. 166). The mother nurses the infant in her arms during most of her leisure moments, and she hushes it to sleep by crooning old lullabies as she rocks it in her arms or in a cradle suspended from a pliable stick.[169] The father hardly handles it during its first year, but many fathers nurse and dandle the older infants for hours together in the most affectionate manner; and, if the child's grandfather is living, he generally becomes its devoted attendant.

About the end of its first year the infant begins to crawl and toddle about the room and gallery, to sprawl into the hearth and eat charcoal, and to get into all sorts of mischief in the usual way. During the first year he lives chiefly on his mother's milk, but takes also thick rice-water from an early age.

Towards the end of the first year the lobes of the ears are perforated, and a ring (or, in the case of a girl, several small rings) is inserted in each. Of childish affections of health, the commonest at this age is yaws (FRAMBOESIA) about the mouth. Kayan mothers believe that every child must go through this, and that one attack protects against its recurrence; and the rareness of the disease in adults seems to bear out this belief. Most of the children are weaned about the end of their second year.

During the next years, until the boy is five or six years of age, he remains always under the care of his mother. He spends the day running about within and around the house and among the boats at the landing-place, playing with his fellows, chasing the pigs and fowls, and bathing in the river. The children are in the main what is commonly called good, they cry but little, and quarrels and outbreaks of temper are few. During the boy's third year a hole is punched in the shell of each ear. A single blow with a bamboo punch takes out a circular piece; into this a circular plug of wax or wood is inserted. The girl, on the other hand, has more rings added to the lobes of her ears, which gradually yield to the weight, and begin to assume the desired character of slender loops. During these years the boy normally takes the first step of his initiation as a warrior by striking a blow at a freshly taken head, or, if need be, at an old one (see vol. ii. p. 169).

It is at some time in the course of these years, usually not earlier than the beginning of the child's third year, that he first receives a name. The occasion of the rite is a general naming of all the children of the house of suitable age; and the time is determined by the conclusion of a successful harvest; for a general feast is made for which much rice and BURAK are required, and these cannot be spared in a year of poor harvest. For each child who is to be named a small human image in soft wood is prepared. This is an effigy of Laki Pesong, the god whose special function it is to care for the welfare of the children. A small mat is woven and a few strips of rattan provided for each child. Each child sits with his (or her) mother in the gallery beside the door of their room, and the parents announce the name they propose for the child. Then the father, or some other man, after killing a chick or young pig, lays the image on the mat before the child, passes one of the rattan strips beneath it, and, holding the image firmly with a big toe on each end of it, pulls the strip rapidly to and fro, until it is made hot by its friction against the image, and smoke begins to rise. While this goes on, the same man, or another, pours out a stream of words addressed to Laki Pesong, the sense of which is a supplication for an answer to the question, "Is this a suitable name? Will he be prosperous under it? Will he enjoy a long life?" etc. He continues the sawing movement until the strip breaks in two. The two pieces are then compared; if they are of unequal length, this result is regarded as expressing the approval of the proposed name by Laki Pesong; if they are of approximately equal length, the god is held to have expressed his disapproval, and another name is proposed and submitted to the same test. If disapproval is thus expressed several times, the naming of the child is postponed to another occasion (Pls. 53, 168).

If a name has been approved, the image, together with the knife used in killing the pig or chicken, is wrapped up in the small mat; the bundle, which, as well as the ceremony, is called PUSA, is thrust behind the rafters of the gallery opposite the door of the child's room, to remain there as a memento of the naming.

When the naming is accomplished a general feast begins, the parents of the newly named children contributing the chief part of the good things; and a number of specially invited guests may participate.

The name so given at this ceremony is borne until the child becomes a parent; when he resigns it in favour of the name given to his child with the title Taman (= father) prefixed (or Tinan in the case of a woman).

Among the Kayans of the upper Rejang the naming ceremonies differ widely from those described above, and

are even more elaborate. The following description was given us by Laki Bo, a Kayan PENGHULU.[170] A child is named sometime between its third month and the end of its second year, the date depending partly on the father's capacity to afford the expenses incidental to the ceremony. The father and his friends obtain specimens of all the edible animals and fish, and after drying them over the fire, set them up in his room in attitudes as lifelike as possible. He procures also the leaves of a species of banana tree which bears very large horn-like fruit, known as PUTI ORAN; and having procured the services of a female DAYONG, who has a reputation for skill in naming, he calls all the friends and relatives of the family to the feast. The DAYONG enters the room where the child is, bearing a fowl's egg, while gongs and drums are beaten and guns discharged. She strokes the child from forehead to navel with the egg, calling out some name at each stroke, until she feels that she has found a suitable name. The whole company then pretends to fall asleep; and presently some go out into the gallery. The DAYONG then calls upon sixteen of the women to enter the room; they enter led by a woman who, pretending to be a fowl, clucks and crows, and says, "Why are you all asleep here? It has been daylight for a long time. Don't you hear me crowing? Wake up, wake up." The child, which has been kept in its parents' cubicle during this first part of the ceremony, is then brought into the large room, and a fowl and small pig are slaughtered and their entrails examined. If these yield favourable omens, the DAYONG begins to chant, invoking the protection of good spirits for the child. Then sixteen men and sixteen women, whose parents are still living, are sent to fetch water for the use of the child and its mother. The feasting then begins, some person eating on behalf of the child, if it is too young to partake of the feast. Eight days later the DAYONG again invokes the protection of the beneficent spirits, and the child is taken out into the gallery and shown to all the household. Some near relative makes a cross upon its right foot with a piece of charcoal, and the child is taken to the door of each room to receive some small present from each roomhold. The child must then return to its parents' room and remain there eight days. After the next harvest a similar feast of pigs' flesh and dried animals is made, and the name is confirmed. But if in the meantime the child has been ill, or any other untoward event has happened, a new name is given to it. In this case it would be usual to choose the well-tried name of some prosperous uncle or aunt. Again the child must be confined to its parents' room for eight days following the feast; and after that time it is free to go where it will, or rather wherever children are allowed to go.

From five or six years onwards the boy more and more accompanies the men in their excursions on the river and in the jungle, and is taught to make himself useful on these occasions, and also on the PADI farm, where he helps in scaring pests and in other odd jobs. But he still has much leisure, which is chiefly devoted to playing with his fellows. Among the principal boys' games the following deserve mention: — Spinning of peg-tops of hard wood, usually thrown overhand, but sometimes underhand, in a manner very similar to that of English boys, each boy in turn striving to strike the tops of the others with his own; this game is played about the time of PADI harvest. Simple kites are flown. A roughly made bow with unfeathered arrow is a somewhat rare toy. Most of the out-door games are of the nature of practice for the chase and war, and of trials of strength and of endurance of pain. Wrestling is perhaps the most popular sport with the older boys and with men. Each grips his antagonist's waist-cloth at its lower edge behind, and strives to lay him on his back (Pl. 169). Throwing mock spears at the domestic pigs or goats, and thrusting a spear through a bounding hoop, afford practice for sport and war. Running games like prisoner's base, and diving and swimming games, are also played. All these boys' games are but little organised, and the competitive motive is not very strongly operative; there are few set rules, and but little scope for, training in leadership and subordination is afforded by them.

In the house less active games are played. In one of the most popular of these a number of children squat in a ring upon the floor; one takes a glowing ember from a hearth, and passes it on to his neighbour, who in turn passes it on as quickly as possible. In this way it goes round and round the ring until the last spark of fire goes out. He or she who holds it at that moment is then dubbed ABAN LALU or BALU DOH (=widower Lalu or widow Doh).

Pets, in the form of birds and the smaller mammals, especially hornbills, parroquets, squirrels, porcupines, are kept in wicker cages.

About the age of ten years the Kayan boy begins to wear a waist-cloth — his first garment — his sister having assumed the apron some two or three years earlier; we are not aware of any ceremony connected with this. From this time onward the boy begins to accompany his father on the longer excursions of the men, especially on the long expeditions in search of jungle produce; and on these occasions he is expected to take an active part in

the labours of the party. Participation in such expeditions affords, perhaps, the most important part of his education. There is little or no attempt made to impart instruction to the children, whether moral or other, but they fall naturally under the spell of custom and public opinion; and they absorb the lore, legends, myths, and traditions of their tribe, while listening to their elders as they discuss the affairs of the household and of their neighbours in the long evening talks. They learn also the prohibitions and tabus by being constantly checked; a sharp word generally suffices to secure obedience. Punishments are almost unknown, especially physical punishments; though in extreme cases of disobedience the child's ear may be tweaked, while it is asked if it is deaf. A sound scolding also is not infrequent, and an incorrigible offender, especially if his conduct has been offensive to persons outside his family, may be haled before the chief, who rates him soundly, and who may, in a more serious case, award compensation to be paid by the delinquent's father. But in the main the Spencerian method of training is followed. A parent warns his child of the ill effects that may be expected from the line of behaviour he is taking, and when those effects are realised, he says, "Well, what did I tell you?" and adds a grunt of withering contempt.

The growth of the children in wisdom and morality is aided also by the hearing from the lips of their elders wise saws and ancient maxims that embody the experience of their forefathers, many of which are possibly of Malay origin. A few of these seem worthy of citation here: —

"Never mind a drop or two so long as you don't spill the whole."

"Better white bones than white eyes" (which means — that death is preferable to shame).

"If you haven't a rattan do the best you can with a creeper."

It is difficult to say exactly at what age puberty begins with the youths. The girls mostly begin their courses in the fourteenth or fifteenth year. By this time the girl of the better class has the lobes of her ears distended to form loops, which allow her heavy ear-rings to reach to her collar-bone or even lower, and she is far advanced towards completion of her tatu on thighs, feet, hands, and forearms (see Chap. XII.). The process is begun at about the tenth year, and is continued from time to time, only a small area being covered at each bout, owing to the pain of the operation and the ensuing inflammation and discomfort.

The boys begin at about fifteen years, or rather earlier, to assert their independence, by clubbing together with those of their own age, and taking up their sleeping quarters with the bachelors in the gallery. At an earlier age the children have picked up a number of songs and spontaneously sing them in groups, but now they begin to develop their powers of musical expression by practising with the KELURI, Jew's harp, drum and TAWAK.

Of these instruments the first is the most used, especially by the youths. It is a rude form of the bagpipes. The KELURI consists of a dried gourd which has the shape of an oval flask with a long neck (Fig. 85). The closed ends of a bundle of six narrow bamboo pipes are inserted in the body of the gourd through a hole cut in its wall, and are fixed hermetically with wax. Their free ends are open, and each pipe has a small lateral hole or stop at a carefully determined distance from the open end. The artist blows through the neck of the gourd, and the air enters the base of each pipe by an oblong aperture which is filled by a vibrating tongue or reed; this is formed by shaving away the wall of the bamboo till it is very thin, and then cutting through it round three sides of the oblong; it is weighted with a piece of wax. The holes are stopped by the fingers, each pipe emitting its note only when its hole is stopped. The physical principles involved are obscure to us. Varieties of this instrument are made by all the tribes of Borneo as well as by many other peoples of the far East (Pl. 70).

The bamboo harp is similar to that made and used by the Punans (see Fig. 86); the SAPEH is a two-stringed instrument of the banjo order; the strings are thin strips of rattan; the whole stem and body are carved out of a single block of hard wood (see Pl. 170 and Fig. 20).

Some of the girls learn to execute a solo dance, which consists largely in slow graceful movements of the arms and hands (Pl. 170). The bigger boys are taught to take part in the dance in which the return from the warpath is dramatically represented. This is a musical march rather than a dance. A party of young men in full war-dress form up in single line; the leader, and perhaps two or three others, play the battle march on the KELURI. The line advances slowly up the gallery, each man turning half about at every third step, the even numbers turning to the one hand, the odd to the other hand, alternately, and all stamping together as they complete the turn at each third step. The turning to right and left symbolises the alert guarding of the heads which are supposed to be carried by the victorious warriors.

A more violent display of warlike feeling is given in the war-dance which is executed by one or two warriors



only. The youth, in full panoply of war, and brandishing a PARANG and shield, goes through the movements of a single combat with some fanciful exaggeration (Pl. 171). He crouches beneath his shield, and springs violently hither and thither, emitting piercing yells of defiance and rage, cutting and striking at his imaginary foe or his partner in the dance. But it is characteristic of the Kayans that neither in this dance nor in actual practice in fencing do they attempt to strike one another. The boy, besides watching these martial displays, is instructed in the arts of striking, parrying, and shielding by the older men, who strike at him with a stick but arrest the blow before it goes home. And we have found it impossible to introduce among them a more realistic mode of playful fencing. The ground of this reluctance actually to strike one another in fencing is probably their strong feeling for symbolism and the prevailing tendency to believe that the symbolical art brings about that which it symbolises. In part also it is due to the fact that to draw the blood of any member of the household is LALI and involves the penalty of a fine.[171]

The youth goes through no elaborate rite of initiation to manhood; and, to the best of our knowledge, there exists no body of secret knowledge or of tradition or rites shared in only by the adult men, to participation in which he might be admitted in the course of such a rite. The only rite that is required to qualify him for taking his place as a full-fledged member of the community is the second occasion on which he strikes at the heads taken in battle. We have seen that he performs this ceremonial act for the first time when still of tender age. The age at which he repeats it depends in part upon the occurrence of an opportunity; it commonly falls between his eighth and fifteenth year. If in a house there is a number of big lads who have not performed this rite, owing to no heads having been taken for some years, a head may be borrowed for the purpose from a friendly household; and in this case the borrowed head is brought into the house with all the pomp and ceremony of successful war.

As the returning war-party approaches the village, the boys who are to take part in the rite are marshalled before the house by a master of the ceremonies. He kills a fowl and thrusts a sharpened stake right through it, so that the point projects from its beak, and slashes the carcass into three pieces, one for the adults of the house, one for the boys, and one for the infants. He then takes a short bamboo knife, and a bunch of ISANG leaves, and, after making a short address to the boys, ties a band of ISANG round the wrist of each of them, and, diluting the blood of the fowl with water, smears some of the mixture on each boy's wrist-band. He puts a handful of rice on a burning log and gives a grain of it to each of the boys to eat.

Some old man of the house goes down to the river to meet the returning war-party and brings up the head (or one of the heads) and holds it out, while the master of ceremonies, holding the portion of the fowl's carcass assigned to the boys, leads up each boy in turn to strike at the head with a sword. The boys then go down to the river; and, while they bathe, a bunch of ISANG with which the head has been decorated is waved over them. During the feasting which follows the boys may eat only twice a day. No youth may join a war-party until he has taken part in this rite. The boys are with few or no exceptions keen to go out to war and therefore they like to go through this ceremony at the earliest permissible opportunity.

When the youth begins to feel strongly the attraction of the other sex, he finds opportunities of paying visits, with a few companions, in friendly houses. It is then said in his own house that he has gone "to seek tobacco," a phrase which is well understood to mean that he has gone to seek female companionship.[172]

We must not pass over without mention a peculiar mutilation which is practised by most of the Kayan youths as they approach manhood, namely, the transverse perforation of the GLANS PENIS and the insertion of a short rod of polished bone or hard wood.

A youth of average presentability will usually succeed in becoming the accepted lover of some girl in his own or another house (cp. Chap. V.); and though he may engage himself in this way with two or three girls in turn before deciding to "settle down," he is usually not much over twenty years of age when he becomes accepted as the future husband of a girl some years his junior. A Kayan youth who has rendered pregnant a girl with whom he has kept company can be relied upon to acknowledge his responsibility and to marry her before her time comes. In general it may be said that the rite of marriage does not mark so complete a change in the recognised relations of the young couple as with ourselves, except perhaps in those parts of this country where "handfasting" is recognised as customary and regular. A time is appointed for the wedding, generally shortly after the completion of the padi-harvest; but this date is liable to be repeatedly postponed to the following year by the occurrence of various events which are regarded as of evil omen and as foretelling the early death of one of the couple if they should persist in going through the ceremony. Such omens are hardly ever disregarded; not even if the girl is far

advanced in pregnancy.[173] In the latter case the girl does not incur the odium that attaches to the production of bastard offspring (see Chap. XX.); she is treated as a married woman would be, and her child is regarded as legitimate.

We describe in the following paragraphs the wedding of the son of an influential Kayan chief to the daughter of the chief of another house of the same village, such as we have had occasion to assist at. The weddings of couples of less exalted station are correspondingly less elaborate in all particulars.

When the appointed time draws near, the bridegroom sends a trusted friend (his "best man") to open negotiations with the bride's parents. The emissary carries with him a number of presents whose value accords with the status and wealth of the bridegroom's parents. For some time the fiction is maintained that the object of his visit is not even suspected by the family, who make enquiries into the nature of his business. After some fencing he comes to the point and asks on behalf of his friend for a definite date at which he may marry the daughter. The parents raise objections and difficulties of all sorts, and perhaps nothing is settled until a second or third visit. If the parents accept the proposal, the best man hands to them five sets each of sixteen beads, the beads of each set being of uniform shape and colour, namely (1) small yellow beads (UTEH); (2) black beads (MEDAK); (3) a set known as HABARANI which may not be worn by the bride before the naming of her first child; (4) light blue beads (KRUTANG); (5) dark blue beads (TOBI). Each of these sets of beads is held to ensure to the bride the enjoyment of some moral good. The girl also sends a string of beads to her lover by the hand of his best man, and at last the date is fixed, due regard being paid to the phases of the moon; new moon is considered the most favourable time of the month. The importance ascribed to the phase of the moon seems to arise from the fact that the shape of the half-moon suggests the state of pregnancy. Tally is kept by both parties of the date agreed upon. On two long strips of rattan an equal number of knots is tied. Each party keeps one of these tallies (often it is carried tied below the knee) and cuts off one knot each morning; when the last knot alone remains, the appointed day is at hand.

The parties on both sides invite the attendance of their friends and relatives, who crowd the gallery of the bride's house. Early in the morning the bridegroom arrives with his best man and a party of young friends in full war-dress; they land from a boat even though they have come but a few yards by water. They march up to the house, some of them carrying large brass gongs; ascending the ladder, they lay the gongs down the gallery from the head of the ladder towards the door of the bride's room at such intervals that the bride can step from one to another. It is understood that these gongs become the property of the bride and her parents. Others of the bridegroom's band carry other articles of value, and when the party reaches the door of the bride's room, they parley with her parents and friends who are gathered in the room, displaying and offering these objects to the defenders of the room as inducements to admit them. They strive also to push open the door. Presently the men of the defending party make a sortie from the room fully armed, and repel the attackers with much show of violence, but without bloodshed. After this sham fight has been repeated, perhaps several times, the bridegroom and his supporters are at last admitted to the room, and they rush in, only to find, perhaps, that the coy maiden has slipped away through the small door which generally gives access to a neighbouring room. The impatient bridegroom cannot obtain information as to her whereabouts, and so he and his men sit down in the room and accept the proffered cigarettes. Presently the bride relents and returns to her parents' room accompanied by a bevy of her girl friends. But the bridegroom takes no notice of her entry. The inevitable pig meanwhile has been laid in the gallery, together with a few gifts for the DAYONG who is to read its liver. Here the final steps of the bargaining are conducted by the friends of the bridegroom. (It is impossible to say in each case how far this bargaining is genuine and how far the terms of the bargain have been arranged beforehand.) More gongs are added to the row upon the floor, chiefly by the friends invited by the bridegroom, who thus make their wedding gifts, perhaps until the row extends to the door of the bride's room. The pig is then killed and its liver examined; and, if necessary, this is repeated with another and another pig, until one whose liver permits of favourable interpretation is found. (A series of bad livers would lead to postponement.) The DAYONG then sprinkles pig's blood and water from a gong upon all the assembly, invoking the blessing of the gods upon the young couple, asking for them long life and many children. Then the bride and bridegroom walk up and down the row of gongs eight times, stepping only upon the metal. In some cases the bridegroom descends to his boat at the landing-stage on each of these eight excursions, thus showing that he is free to come and go as he pleases and has no entanglements. In this degenerate age the ceremony terminates with this act, but for the feasting and speech-making which fill up the evening

hours. But in the old days, as we are credibly informed by those who have been eye-witnesses, the bride descended with the groom and his party to his boat and was then carried off at full speed, pursued by several boat-loads of her friends. The fleeing party would then check the pursuit by throwing out on to the bank every article of value still remaining among them; each article in turn would be snapped up by the pursuers, who then, having thus resisted to the last and extorted the highest possible price from the bridegroom, would allow the happy pair to console each other in peace for the many trials they had had to endure.

It may seem difficult to reconcile the form of the marriage ceremony (involving as it does a blending of symbolical capture with actual purchase) with the fact that, in accordance with the custom almost universally followed among Kayans, the bridegroom becomes a member of the room of his father-in-law and remains there for some years before carrying off his wife to his own house. But we think this latter practice, which in some quarters has been regarded as a survival from a matriarchal organisation of society, is a recently introduced custom, which has come rapidly into favour as a means by which the bridegroom and his friends avoid a part of the expense involved in the older form of marriage. For the residence for a period of years of the young couple in the house and room of the wife's parents is made a part of the marriage contract. If the bride is the only child of a chief, her husband may remain permanently in her home and succeed her father as chief. But in most cases the couple migrates to the husband's house after a few years, generally on the occasion of the building of a new house or on the death of his father, both of which events afford him the opportunity of becoming head of a room and thus taking rank as, and assuming the full responsibilities of, a PATER FAMILIAS.

The marriage ceremonies of the Kenyahs and Klemantans are similar but less elaborate. But the Sea Dayak ceremony is different. A feast is made in the house of the girl's parents. The bridegroom makes no considerable gifts to the parents of the bride, though he is generally expected to become a member of their household for the first few years of his married life. The principal feature of the ceremony is the splitting open of a PINANG (the seed of the areca palm) during the feast, in the presence of the young couple and their relatives. The two halves are examined for signs of decay or imperfection; and if there are none, the marriage is regarded as approved. A live fowl is waved over the couple by the chief of the house as he says, "Make them prosperous, make them happy, give them long life, make them wealthy, etc. etc." The phrases conform to a conventional pattern, but each orator modifies and adapts them freely. The words seemed to be addressed to the fowl, and it seems impossible to discover in the Iban mind any conception of a higher power behind or beyond the fowl, though we may suspect that in a vague way the live fowl symbolises or represents Life in general or the power behind Nature (Pl. 173).

Few or no Kayans can state their age without going through some preliminary calculations, and even then their statements are apt to be vague and uncertain. A Kayan mother can generally work out the age of each of her children on request. She puts down in a row bits of leaf or stick, one for each year, working back from the present, and recalling each year by the name of the place where the PADI crop of that year was raised. When she reaches back to, the year of the birth of any one of her children, she says that the child was born about or before or soon after this particular harvest, and by counting the pieces of stuff laid down she then arrives at the child's age.

An elderly man can generally make no more accurate statement regarding his age than that at the time of the great eclipse he had just begun to wear a waist-cloth, or that when the great guns were heard (I.E. the sound of the eruption of Krakatoa) he was just beginning "to look for tobacco."

We mention here a statement commonly made by Kayans, which, if true, is of some interest as reporting a curious exception to a world-wide custom commonly regarded as directly determined by the difference of nature between the sexes, the report, namely, that among the Kalabits the initiative in all love-making is taken by the women. We have no detailed information in regard to their courtship and marriage procedures.

## CHAPTER 19. The Nomad Hunters

In almost all parts of Borneo there are to be found hidden in the remotest recesses of the jungles small bands of homeless nomad hunters. All these closely resemble one another in physical characters and in mode of life; but differences of language mark them as belonging to several groups, of which the Punans, the Ukits, the Sians, the Bukitans, the Lugats, and the Lisums are the best known. Hitherto we have designated all these groups by the name Punan, which properly belongs to the largest group only. These groups inhabit different areas, though there is considerable overlapping; and it seems probable that they are merely local varieties of one stock, and that their differences are mainly the results of geographical separation and of intercourse with, and probably some mingling of blood with, the settled tribes of the regions inhabited by the several groups. For their languages seem to be closely allied; but in each region the nomads seem to have adopted many words from their settled neighbours, with whom they trade; and instances are known to us in which the men of the settled tribes have married women of the nomads and have adopted their mode of life, and others in which children of nomad women, married into Kenyah, Kayan, or other villages, have gone back to their mothers' people.

The Punans proper are found in the central highlands wandering through the upper parts of the basins of all the large rivers; here and there they range into the lowlands, and in rare instances they even reach the coast. The Ukits, on the other hand, confine themselves to the interior, and are found chiefly in the upper parts of the basins of the Kotei, the Rejang, the Kapuas, and Banjermasin rivers. The Bukitans inhabit chiefly the upper basins of the rivers of Sarawak. Although these nomads wander perpetually in the forests, moving their camp every few weeks or months, any one group attaches itself to a particular area, partly because they become familiar with its natural resources, partly because they establish friendly relations with the villagers of the region, with whom they barter jungle-produce to the advantage of both parties. The settled tribesmen of any region find this trade so profitable that they regard the harmless nomads with friendly feelings, learn their language, and avoid and reprobate any harsh treatment of them that might drive them to leave their district. In fact they look upon them with a certain sense of proprietorship and are jealous of their intercourse with other tribes; the nomads, in fact, rank high among the many natural products of the jungle that render any particular region attractive to the tribesmen.

Of all these nomad groups the Punans are the most numerous and we have seen more of them than of any others. We therefore describe their peculiar mode of life; but it may be understood that what we say of them holds good in the main of the other groups of nomads with but little modification.

From the point of view of physical development the Punans are among the finest of the peoples of Borneo. They resemble the Kenyahs more closely than any other tribe; that is to say, they are of very pale yellow colour, of short stature with long body and short legs, but otherwise well proportioned and very sturdily built with well-rounded limbs and large muscular development. Their heads are subbrachycephalic and inclining to be square; their features are more regular than those of most other tribes; their most distinctive physical characters are a relatively well-developed nasal bridge, nostrils directed so much forward that one seems to look right into their heads through them, and the slight greenish tinge and fine silky texture of their pale yellow skins. The greenish tinge may be noticed in all nomad Punans, and it is possible that the ruddier darker tint of the agricultural peoples is largely or wholly due to their greater exposure to the sun; for the Punan fears the broad daylight and rarely or never leaves the deep shade of the jungle.

In fineness of texture of the skin they surpass all the other tribes, and they seldom or never suffer from the disfiguring scaly affections of the skin so common among the others.

The Punans are more uniform as regards their physical characters than the other peoples; there are no distinctions of upper and lower social strata as among the other tribes, and thus the mixture of blood, which in the Kayan and Kenyah communities results from the adoption of war captives into the lower class, does not occur with them; and they present none of the wide diversities of type such as are common in the other tribes, especially between the upper and lower social classes. They correspond, in fact, to the relatively pure bred upper classes of the other tribes, and present the same high standard of physical development and vigour. It is not improbable that

the severer conditions of their mode of life contribute to maintain this high standard.

The facial expression and the bodily attitudes of the Punans are also characteristic. When gathered in friendly talk with strangers, even those whom they have every reason to trust, they prefer to remain squatting on their heels, rather than to sit down on a mat; and the tension of their muscles, combined with the still alert watchfulness of their faces, conveys the impression that they are ready to leap up and flee away or to struggle for their lives at any moment. It is doubtless this alertness of facial expression and bodily attitude that gives the Punan something of the air of an untameable wild animal.

In spite of his distrustful expression the Punan is a likeable person, rich in good qualities and innocent of vices. He never slays or attacks men of other tribes wantonly; he never seeks or takes a head, for his customs do not demand it; and he never goes upon the warpath, except when occasionally he joins a war-party of some other tribe in order to facilitate the avenging of blood. But he will defend himself and his family pluckily, if he is attacked and has no choice of flight; and, if any one has killed one of his relatives, he will seek an opportunity of planting a poisoned dart in his body. In a case of this kind all the Punans of a large area will aid one another in obtaining certain information as to the identity of the offender; and any one of them will avenge the injury to his people, if the opportunity presents itself. They do not avenge themselves indiscriminately on all or any member of the offender's village or family, but they will postpone their vengeance for years, if the actual offender cannot be reached more promptly. It seems worth while to recount a particular instance of Punan vengeance. The Punans of the Tinjar basin were claimed by a Sebop chief; that is to say, the chief, Jangan by name, regarded them as under his protection and as therefore under an obligation to trade with him and his people only. But the Pokun people in the basin of a neighbouring river, the Balaga, a tributary of the Rejang, also claimed similar rights over the Punans of the district. One of these Pokuns, a man of the upper class, being angered by the adhesion of the Punans to the chief Jangan and by their refusal to trade with him, cut down one of them during an altercation in the jungle, leaving him dead on the spot. The companions of the murdered man retired, and all the Punans deserted the neighbourhood of the Pokuns. Some four years later the Pokun community migrated to the Tinjar; and shortly afterwards the murderer, thinking the whole matter was forgotten, set out through the jungle with a small party to seek to trade with another group of Punans. While on the march he was struck in the cheek (the favourite spot for the aim of the Punan marksman) by a poisoned dart from an unseen assailant and died within ten minutes. His companions, remembering the incident of four years before, suspected the Punans, but saw no trace of any.

The Punans confessed the act of vengeance to Jangan, and he communicated the facts to the Resident of the Baram district (C. H.), who happened to be in the neighbourhood at the time. The Pokuns wished to take vengeance on the Punans, and they would undoubtedly have turned out in force to hunt down and kill all the Punan men they could find, but that the Resident forbade them to take action, and enforced his command by threatening to burn down their houses in their absence. It is only fair to add that the Pokun chief recognised the justice of this prohibition and showed no resentment.

That the Punans will not allow the slaying of any one of their number to go unavenged on the person of the slayer is well known to all the people of the country, and this knowledge does much to give them immunity from attack.

The Punans cultivate no crops and have no domestic animals. They live entirely upon the wild produce of the jungle, vegetable and animal. Of the former, sago and a form of vegetable tallow found in the seed of a tree (SHOREA) are the most important. Animals of all kinds are eaten, and are secured principally by the aid of the blow-pipe and poisoned darts, in the use of which the Punans are very expert. The Punan dwelling is merely a rude low shelter of palm leaves, supported on sticks to form a sloping roof which keeps off the rain but very imperfectly, and leaves the interior open on every side.[174]

A Punan community consists generally of some twenty to thirty adult men and women, and, about the same number of children. One of the older men is recognised as the leader or chief. He has little formally defined authority, but rather the authority only that is naturally accorded to age and experience and to the fuller knowledge of the tribal history and traditions that comes with age. His sway is a very mild one; he dispenses no substantial punishments; public opinion and tradition seem to be the sole and sufficient sanctions of conduct among these Arcadian bands of gentle wary wanderers. Decisions as to the movements of the band are arrived at by open discussion, in which the leader will exercise an influence proportioned to his reputation for knowledge and judgment. He is mainly responsible for the reading of the omens, and has charge of the few and simple

household gods — if that lofty title may be given to the wooden image of a crocodile and the bundle of charms attached to it which are always to be seen in a Punan camp.

If, in case of disagreement, one or more of the members of a band refuses to accept the judgment of the leader and of the majority, he, or they, will withdraw from the community together with wife and children, to form a band which, though in the main independent of the parent group, will usually remain in its near neighbourhood and maintain some intercourse. Fighting between Punans, whether of the same or of different communities, is very rare; the only instances known to us are a few in which Punans have been incited by men of other tribes to join in an attack on their fellows.

The members of the band are for the most part the near relatives of the leader, brothers and sons and nephews with their wives and children. Each man has usually one wife. We know of no instances of polygyny amongst them; though we know of cases in which a Punan woman has become the second wife of a man of some other tribe. On the other hand, polyandry occurs, generally in cases in which a woman married to an elderly man has no children by him. They desire many children, and large families are the rule; a family with as many as eight or nine children is no rarity.

Marriage is for life, though separation by the advice and direction of the chief, or by desertion of the man to another community, occurs. Sexual restraint is probably maintained at about the same level as among the other peoples, the women being more strictly chaste after than before marriage. The ceremony of marriage is less elaborate than among the settled tribes. A young man will become the lover of a girl generally of some other group than his own, and when she becomes pregnant the marriage is celebrated. There is little or no formal arrangement of marriages by the elders on behalf of the young people.

The ceremony of marriage consists merely in a feast in which all, or most of, the members of the two communities take part. Speeches are made, and the leaders exhort the young couple to industry and to obedience to themselves, making specific mention of the principal duties of either sex, such as collecting camphor and procuring animal food for the man, the preparing of sago, cooking, and tending the children for the woman.

After the ceremony, the husband joins the wife's community and generally remains a member of it; unlike the Kayans, among whom a husband, though he may live for some years with his wife's people, eventually brings her to his father's village. No definite payment is made to the parents of the bride, but some small gift, perhaps two or three pounds of tobacco, is usually presented to them by the bridegroom.

Adverse omens may cause the postponement of a marriage; but beyond this there seems to be no regular method of obtaining or seeking divine sanction for the marriage; an offering of cooked food may be made to Bali-Penyalong, by placing it on a stake beneath the image of the crocodile (which seems to serve as an altar) with some dedicatory words — for like the other peoples the Punans are voluble in speech, both in human intercourse and in appealing to the supernatural powers. On such occasions the words uttered usually take in part the form of a prayer for protection from danger.

Those who are accustomed to all the complex comforts and resources of civilisation, and to whom all these resources hardly suffice to make tolerable the responsibility and labour of the rearing of a family, can hardly fail to be filled with wonder at the thought of these gentle savages bearing and rearing large families of healthy well-mannered children in the damp jungle, without so much as a permanent shelter above their heads. The rude shelter of boughs and leaves, which is their only house, is perhaps made a little more private than usual for the benefit of the labouring woman. The pregnant woman goes on with her work up to the moment of labour and resumes it almost immediately afterwards. She at once becomes responsible for the care of the infant. The only special treatment after childbirth is to sit with the back close to a fire, so as to heat it as much as can be borne. The delivery is sometimes aided by tightly binding the body above the gravid uterus in order, it would seem, to prevent any retrogression of the process. While the mother goes about her work in camp, the infant is usually suspended in a sling of bark-cloth from a bent sapling or branch, an arrangement which enables the mother to rock and so soothe the child by means of an occasional push. When travelling or working in the jungle the mother carries the infant slung upon her back, either in a bark-cloth or a specially constructed cradle of plaited rattan such as is used by the Kayans. The infant is suckled from one to two years, and then takes to the ordinary diet of boiled wild sago, varied with other animal and vegetable products of the jungle.

The children begin to help in the family work at a very early age. They are disciplined largely by frequent warnings against dangers, actual and suppositious, of which they remain acutely conscious throughout life. This

discipline no doubt contributes largely to induce the air and the attitude of timid alertness which are so characteristic of the Punan. Harmony and mutual help are the rule within the family circle, as well as throughout the larger community; the men generally treat their wives and children with all kindness, and the women perform their duties cheerfully and faithfully.

The religious beliefs and practices of the Punans are similar to those of the Kayans, but are less elaborated. They observe a simpler system of omens, of which the behaviour and calls of lizards and grasshoppers and of the civet cat (*ARCTOGALE*) are the chief. They pray to Bali Penyalong, who seems to be the principal object of their trust. This being is probably conceived anthropomorphically, but his human qualities are not so clearly marked as in the case of the gods of the settled tribes. They make no images in human form, and we do not know that Bali Penyalong is supposed by them to have a wife. The only image used in rites is the wooden image of the crocodile, which is carried from place to place with every change of camp. In communicating with the omen-creatures, fire and the frayed sticks are used in much the same way as by the Kayans. Their rites involve no animal sacrifices, and they do not look for guidance or answer to prayer in the entrails of animals. It seems probable that the Punans in each region have absorbed some of their religious and superstitious notions from the settled tribes of the same region; for in each region the Punan beliefs are different, showing more or less affinity to those of the settled tribes. It is an obscure question whether all their religious belief has been thus absorbed from more cultured neighbours, or whether the Punans represent in this and other respects the perpetuation (perhaps with some degeneration or impoverishment) of a more primitive culture once common to the ancestors of all, or the greater part of, the tribes of Borneo.[175] The fact that the principal divinity recognised by them bears the same name (Bali Penyalong) as the chief god of the Kenyahs is compatible with either view.

Beside Bali Penyalong the Punans are aware of the existence of other divinities, which, however, are very obscurely conceived and seldom approached with prayer or rite. As regards the land of shades and the journey thither, Punan beliefs are closely similar to those of Kenyahs and some of the Klemantans. Their account of the journey of the dead includes the passage of a river guarded by a great fish and a hornbill (see Chap. XIV.). But they practice no burial and no funeral rites. As soon as a man dies in any camp, the whole community moves on to a new camp, leaving his body under one of their rude shelters, covered only with a few leaves and branches.

Their view of the life after death seems to involve no system of retribution and to be wellnigh devoid of moral significance. Their religious beliefs probably influence their conduct less strongly than do those of the Kayans; for among the latter such beliefs certainly make strongly for social conduct, I.E. for obedience to the chiefs and for observance of custom and public opinion; but in the Punan community the conditions of life are so simple and so nearly in harmony with the impulses of the natural man that temptations to wrong-doing are few and weak; external sanctions of conduct, therefore, are but little needed and but little operative.

Danger assails the Punan on every side and at all times, hence alertness, energy, and courage are the prime virtues; courage is rated highest, and a woman looks especially for courage in her husband. But though courageous and active, Punans are not pugnacious; as was said above, they rarely or never fight against one another, and the nomadic groups of each region maintain friendly relations with one another. Within each group harmony and mutual helpfulness is the rule; each shares with all members of the group whatever food, whether vegetable or animal, he may procure by skill or good fortune. On returning to camp with a piece of game, a Punan throws it down in the midst and it is treated as common property. If he has slain a large pig or deer, too heavy for him to bring in unaided, he returns to camp and modestly keeps silence over his achievement until some question as to his luck is put to him; then he remarks that he has left some small piece of game in the jungle, a mere trifle. Three or four men will then set out and, following the path he has marked by bending down twigs on his way back to camp, will find the game and bring it in. If a present of tobacco is made to one member of a group of Punans, the whole mass is divided by one of them into as many heaps as there are members of the band present; and then each of them, men and women alike, takes one heap for his or her own use, the one who divided the mass taking the heap left by the rest.

In spite of their shyness and timidity, they respond readily to kind treatment. They are never seen on the rivers, as they have no boats and cannot easily be persuaded to venture a trip in a boat. It is possible to make many expeditions through the jungle without getting any glimpse of them. One of us (C. H.) had lived in the Baram district six years before succeeding in seeing a single Punan. The history of his first meeting with Punans may serve to illustrate their timidity, caution, and good feeling. On making a long hunting trip on the slopes of Mount

Dulit, he took with him a Sebop who was familiar with Punans and their language. For some days no trace of them was seen; but one morning freshly made footprints were observed round about the camp. The following night a cleft stick was set up at some twenty paces from the camp with a large cake of tobacco in the cleft, and on the stick a mark was carved which would be understood by the Punans as implying that they were at liberty to take the tobacco. This is a method of opening communications and trade with them well known to the Klemantans. In the morning the tobacco had disappeared, and fresh foot prints showed that its disappearance was due to human agency. The following night this procedure was repeated, and in the course of the day Punan shouts were heard, coming from a distance of some hundreds of yards. The interpreter was sent out with instructions to parley and, if possible, to persuade the Punans to come into camp. Presently he returned with two shy but curious strangers, who squatted at some distance and were gradually encouraged to come to close quarters. After staying a few minutes and accepting presents of tobacco and cloth, they made off. On the following day they returned with eight male companions, bringing a monkey, a hornbill, and a rare bird, all killed with their poisoned darts; and they enquired how much rubber they should bring in return for the tobacco. They were told that no return was expected, but, understanding that animals of all sorts were being collected, they attached themselves to the party, lent their unmatched skill to adding to the collections, and brought in many rare specimens that now repose safely in the Natural History Museum at South Kensington. They soon gained confidence and took up their sleeping quarters under the raised floor of the rough hut; and, when after some weeks the time for parting came, they voluntarily took a prominent part in carrying down the collections to the boats, and went away well satisfied with the simple presents they received.

Punans never build boats or travel on the water of their own initiative and agency. In fact they dislike to come out from the shade of the forest on to a cleared space or the stony bed of the river. They are very conservative in spite of their intercourse with more advanced tribes, and they harbour many irrational prejudices. They entertain a particular aversion to the crocodile, an aversion strongly tinged with awe. They will not kill it or any one of their omen-beasts. They are very shy of whatever is unfamiliar. Many of them will not eat salt or rice when opportunity offers.

The medicine men or DAYONGS of the Punans are distinguished for their knowledge and skill, and are in much request among the other tribes for the catching of souls and the extraction of pains and disease. They are therefore fairly numerous; but, as among the other peoples, the calling is a highly specialised one, though not one which occupies a man's whole time or excuses him from the usual labours of his community. Their methods do not differ widely from those of the Kayan and Kenyah DAYONGS.

The Punan has great faith in charms, especially for bringing good luck in hunting. He usually carries, tied to his quiver, a bundle of small objects which have forcibly attracted his attention for any reason, E.G. a large quartz crystal, a strangely shaped tusk or tooth or pebble, etc., and this bundle of charms is dipped in the blood of the animals that fall to his blow-pipe.

As regards dress and weapons the Punan differs little from his neighbours. A scanty waist-cloth of home-made bark-cloth, or equally scanty skirt for the woman, strings of small beads round wrists or ankles or both, numbers of slender bands of plaited palm-fibre below the knees and about the wrists, and sometimes a strip of cloth round the head, make up his costume for all occasions.

All his belongings are such as can easily be transported. He carries a sword, a small knife, a blow-pipe with spear-blade attached, and a small axe with long narrow blade for working camphor out of the heart of the camphor-tree. Besides these essential tools and weapons, which he constantly carries, the family possesses sago-mallets and sieves, dishes and spoons or spatulas of hard wood, and tongs of bamboo for eating sago,[176] a few iron pots,[177] large baskets for carrying on the back, a few mats of plaited rattan, and small bamboo boxes.

These are the sum of the worldly goods of a Punan family, and it would, we suppose, be difficult to find another people who combine so great a poverty in material possessions with so high a level of contentment and decent orderly active living.

Although his material possessions are so few, the Punan is not capable of fashioning all of them by his own independent efforts. All his metal tools he obtains from the Kayans (or other tribes) who are his patrons. But everything else he makes with his own hands. The long blow-pipe of polished hard-wood, which is his favourite weapon, he makes by the same methods and as well as the Kayans. But the iron rod which he uses in the process of boring the wood he cannot make. This illustrates his intimate dependence on other tribes, and seems to imply



that the blow-pipe, at least in the highly finished form in which it is now used, cannot have been an independent achievement of the Punans. They are especially skilful in the plaiting of rattan strips to make baskets, mats, and sieves. They do little wood-carving, but carve some pretty handles for knives and decorative pieces for the sword-sheaths from the bones of the gibbon and deer. They are expert also in making bamboo pipes with which to imitate the calls of the deer and of some of the birds.

Hunting, tracking, and trapping game are the principal and favourite pursuits of the men; they display much ingenuity in these pursuits and attain a wonderful skill in the interpretation of the signs of the jungle. For example, a Punan is generally able to read from the tracks left in the jungle by the passage of a party of men, the number of the party, and much other information about it. They are expert scouts, and, when their neighbourhood is invaded by any party whose intentions are not clearly pacific, they will follow them for many days, keeping them under close observation while remaining completely hidden.

The Punan has few recreations. His highest artistic achievement is in song. His principal musical instrument is a simple harp made from a length of thick bamboo (Fig. 86); from the surface of this six longitudinal strips are detached throughout the length of a section of twenty inches or more, but retain at both ends their natural attachments. Each strip is raised from the surface by a pair of small wooden bridges, and is tuned by adjusting the interval between these. The only other musical instrument is a very simple "harmonica." A series of strips of hard-wood, slightly hollowed and adjusted in length, are laid across the shins of the operator, who beats upon them with two sticks. But the finest songs are sung without accompaniment and are of the nature of dramatic recitals in the manner of a somewhat monotonous and melancholy recitative. To hear a wild Punan, standing in the midst of a solemn circle lit only by a few torches which hardly seem to avail to keep back the vast darkness of the sleeping jungle, recite with dramatic gesture the adventures of a departing soul on its way to the land of shades, is an experience which makes a deep impression, one not devoid of aesthetic quality.

In dancing, the Punan attains only a very modest level. The men dance upon a narrow plank (for the good reason that they have nothing else to dance upon); and the exhibition is one of skilful balancing on this restricted base while executing a variety of turning movements and postures. The women dance in groups with very restricted movements of the feet, and some monotonous swaying movements of the arms and body. The men also imitate the movements of monkeys and of the hornbill and the various strange sounds made by the latter.

The most striking evidence of the low cultural standing of the Punan is the fact that he cannot count beyond three (the words are JA, DUA, TELO); all larger numbers are for him merely many (PINA). Yet, although in culture he stands far below all the settled agricultural tribes, there is no sufficient reason for assuming him to be innately inferior to them in any considerable degree, whether morally or intellectually. Any such assumption is rendered untenable by the fact that many Punans have quickly assimilated the mode of life and general culture of the other tribes; and there can be no doubt, we think, that many of the tribes that we have classed as Klemantan and Kenyah are very closely related to the Punans, and may properly be regarded as Punans that have adopted Kayan or Malay culture some generations ago.

## CHAPTER 20. Moral and Intellectual Peculiarities

In this chapter we propose to bring together a number of observations which have found no place in foregoing chapters but which will throw further light on the moral and intellectual status of the pagan tribes.

We have seen that among the Kayans the immediate sanction of all actions and of judgments of approval and disapproval is custom, and that the sanction of custom is generally supported by the fear of the TOH and of the harm they may inflict upon the whole house. The principle of collective or communal responsibility of the household, which is thus recognised in face of the spiritual powers, as well as in face of other communities, gives every man an interest in the good behaviour of his fellows, and at the same time develops in him the sense of obligation towards his community. The small size of each community, its separation and clear demarcation by its residence under a single roof, its subordination to a single chief, and its perpetual conflict and rivalry with other neighbouring communities of similar constitution, all these circumstances also make strongly for the development in each of its members of a strong collective consciousness, that is to say, of a clear consciousness of the community and of his place within it and a strong sentiment of attachment to it. The attachment of each individual to his community is also greatly strengthened by the fact that it is hardly possible for him to leave it, even if he would. For he could not hope to maintain himself alone, or as the head of an isolated family, against the hostile forces, natural and human, that would threaten him; and it would be very difficult for him to gain admittance to any other community.

It is only when we consider these facts that we can understand how smoothly the internal life of the community generally runs, how few serious offences are committed, how few are the quarrels, and how few the instances of insubordination towards the chief, and how tact and good sense can rule the house without inflicting any other punishment than fines and compensatory payments.

And yet, when all these circumstances have been taken into account, the orderly behaviour of a Kayan community must be in part regarded as evidence of the native superiority of character or disposition of the Kayans. For though the Sea Dayaks, Klemantans, and Muruts, live under very similar conditions, they do not attain the same high level of social or moral conduct. Among the Muruts there is much drunkenness and consequent disorder, and the same is true in a less degree of the Sea Dayaks; among them and some of the Klemantan tribes quarrels within the house are of frequent occurrence, generally over disputed ownership of land, crops, fruit-trees, or other property. And these quarrels are not easily composed by the chiefs. Such quarrels not infrequently lead to the splitting of a community, or to the migration of the whole house with the exception of one troublesome member and his family, who are left in inglorious isolation in the old house.

But the higher level of conduct of the Kayans is in most respects rivalled by that of the Kenyahs, and some importance must therefore be attributed to the one prominent feature of their social organisation which is peculiar to these two peoples, namely a clearly marked stratification into three social strata between which but little intermarriage takes place. This stratification undoubtedly makes for a higher level of conduct throughout the communities in which it obtains; for the members of the higher or chiefly class are brought up with a keen sense of their responsibility towards the community, and their example and authority do much to maintain the standards of conduct of the middle and lower classes.

We have said that almost all offences are punished by fines only. Of the few offences which are felt to require a heavier punishment, the one most seriously regarded is incest. For this offence, which is held to bring grave peril to the whole house, especially the danger of starvation through failure of the PADI crop, two punishments have been customary. If the guilt of the culprits is perfectly clear, they are taken to some open spot on the river-bank at some distance from the house. There they are thrown together upon the ground and a sharpened bamboo stake is driven through their bodies, so that they remain pinned to the earth. The bamboo, taking root and growing luxuriantly on this spot, remains as a warning to all who pass by; and, needless to say, the spot is looked on with horror and shunned by all men. The other method of punishment is to shut up the offenders in a strong wicker cage and to throw them into the river. This method is resorted to as a substitute for the former one, owing

to the difficulty of getting any one to play the part of executioner and to drive in the stake, for this involves the shedding of the blood of the community.

The kind of incest most commonly committed is the connection of a man with an adopted daughter, and (possibly on account of this frequency) this is the kind which is most strongly reprobated. It is obvious also that this form of incest requires a specially strong check in any community in which the adoption of children is a common practice. For, in the absence of severe penalties for this form of incest, a man might be tempted to adopt female children in order to use them as concubines. We find support for this view of the ground of the especially severe censure on incest of this form in the fact that intercourse between a youth and his sister-by-adoption (or VICE VERSA) is not regarded as incest, and the relation is not regarded as any bar to marriage. We know of at least one instance of marriage between two young Kenyahs brought up together as adopted brother and sister.[178] Of other forms of incest the more common (though, it should be said, incest of any form is very infrequent) are those involving father and daughter, brother and sister, and brother and half-sister.

The punishment of the incestuous couple does not suffice to ward off the danger brought by them upon the community. The household must be purified with the blood of pigs and fowls; the animals used are the property of the offenders or of their family; and in this way a fine is imposed.

When any calamity threatens or falls upon a house, especially a great rising of the river which threatens to sweep away the house or the tombs of the household, the Kayans are led to suspect that incestuous intercourse in their own or in neighbouring houses has taken place; and they look round for evidences of it, and sometimes detect a case which otherwise would have remained hidden. It seems probable that there is some intimate relation between this belief and the second of the two modes of punishment described above; but we have no direct evidence of such connection.[179]

All the other peoples also, except the Punans, punish incest with death. Among the Sea Dayaks the most common form of incest is that between a youth and his aunt, and this is regarded at least as seriously as any other form. It must be remembered that, owing to the frequency of divorce and remarriage among the Sea Dayaks, a youth may find himself in the position of step-son to half a dozen or more divorced step-mothers, some of them perhaps of his own age, and that each of them may have several sisters, all of whom are reckoned as his aunts; therefore he must walk warily in his amorous adventures.

Sexual perversion of any form is, we think, extremely rare among the pagan tribes of Borneo. We have never heard of any case of homosexuality on good authority, and we have never heard any reference made to it; and that constitutes, to our thinking, strong evidence that vice of that kind is unknown among most of the tribes. It is not unknown, though not common, among the Malays and Chinese, and, if cases occur sporadically among the pagans, they are presumably due to infection from those quarters.

#### Homicide

Kayans, as we have seen, have no scruple in shedding the blood of their enemies, but they very seldom or never go to war with other Kayans; and the shedding of Kayan blood by Kayans is of rare occurrence. To shed human blood, even that of an enemy, in the house is against custom. Nevertheless murder of Kayan by Kayan, even by members of the same house, is not unknown. In a wanton case, where two or more men have deliberately attacked another and slain him, or one has killed another by stealth, the culprit (or culprits) would usually be made to pay very heavy compensation to relatives, the amount being greater the higher the social status and the greater the wealth of the culprit; the amount may equal, in fact, the whole of his property and more besides; and he might, in order to raise the amount, have to sell himself into slavery to another, slavery being their only equivalent to imprisonment. The relatives would probably desire to kill the murderers; but the chief would generally restrain them and would find his task rendered easier by the fact that, if they insist on taking the murderer's life, they would forfeit their right to compensation.[180] The amount of the compensation to be paid would not depend upon the social standing of the murdered man, but the fine paid to the house or chief would be heavier in proportion to his rank. But we have knowledge of cases in which chiefs have, with the approval of the house, had a murderer put to the sword. The murderer who has paid compensation has, however, by no means set himself right with the household; they continue to look askance at him. Set fights or duels between men of the same house are very rare. If a Kayan of one house kills one of another, his chief would see that he paid a proper compensation to the relatives, as well as a fine to his own house. If a man killed his own slave, he would be liable to no punishment unless the act were committed in the house; but public opinion would strongly disapprove.

'Running AMOK' is not unknown among Kayans, though it is very rare. If a man in this condition of blind fury kills any one, he is cut down and killed, unless he is in the house; in which case he would be knocked senseless with clubs, carried out of the house into the jungle, and there slain.

Drunkenness during an act of criminal violence is regarded as a mitigating circumstance, and the fines and compensation imposed would be of smaller amount than in a case of similar crime deliberately committed.

Suicide is strongly reprobated, and, as we have seen, the shades of those who die by their own hands are believed to lead a miserable and lonely existence in a distressful country, Tan Tekkan, in which they wander picking up mere scraps of food in the jungle. Nevertheless, suicides occur among Kayans of both sexes. The commonest occasion is the enforced separation of lovers, rather than the despair of rejected lovers. We have known of two instances of Kayan youths who, having formed attachments during a long stay in a distant house and who then, finding themselves under the necessity of returning home with their chief and unable to arrange marriage with their fair ones, have committed suicide. The method most commonly adopted is to go off alone into the jungle and there to stab a knife into the carotid artery. The body of a suicide is generally buried without ceremony on the spot where it is found. Suicides of women are rarer than those of men; desertion by a lover is the commonest cause.

Dishonesty in the form of pilfering or open robbery by violence are of very rare occurrence. Yet temptations to both are not lacking. Fruittrees on the river-bank, even at some distance from any village, are generally private property, and though they offer a great temptation to passing crews when their fruit is ripe, the rights of the proprietor are usually respected or compensation voluntarily paid. Theft within the house or village is practically unknown. Even before the European governments were established, Malay and Chinese traders occasionally penetrated with boat-loads of goods far into the interior; and now such enterprises are regularly and frequently undertaken. Occasionally a trader establishes himself in a village for months together, driving a profitable trade in hardware, cloth, tobacco, etc. These traders usually travel in a small boat with a company or crew of only two or three men, and they are practically defenceless against any small party of the natives who might choose to rob or murder them. Such traders have now and again been robbed, and sometimes also murdered, by roving bands of Sea Dayaks, but we know of no such act committed by Kayans or Kenyahs. The trader puts himself under the protection of a chief and then feels his life and property to be safe.

It would not be true to say that the Kayans or any of the other peoples are always strictly truthful. They are given to exaggeration in describing any event, and their accounts are apt to be strongly biassed in their own favour. Nevertheless, deliberate lying is a thing to be ashamed of, and a man who gets himself a reputation as a liar is regarded with small favour by his fellows.

The Kayans, as we have said elsewhere, are not coarse of speech, and both men and women are strictly modest in respect to the display of the body. Though the costume of both sexes is so scanty, the proprieties are observed. The Kayan man never exposes his GENITALIA even when bathing in the company of his fellows, but, if necessary, uses his hands as a screen. The bearing of the women is habitually modest, and though their single garment might be supposed to afford insufficient protection, they wear it with an habitual skill that compensates for the scantiness of its dimensions; they bathe naked in the river before the house, but they slip off their aprons and glide into the water deftly and swiftly; and on emerging they resume their garments with equal skill, so that they cannot be said to expose themselves unclothed. The same is true of most of the other tribes, with the exception of the men of Kenyah and Klemantan communities that inhabit the central highlands; these, when hauling their boats through the rapids, will divest themselves of all clothing, or will sit naked round a fire while their waist-cloths are being dried, without the least embarrassment.

There is no Kayan word known to us that could properly be translated as justice or just, injustice or unjust. Yet it is obvious that they view just conduct with approval and unjust with disapproval; and they express their feelings and moral judgments by saying laconically of any particular decision by a chief, TEKAP or NUSI TEKAP. But the word TEKAP is of more general application than our word 'just,' and might be applied to any situation which evokes a judgment of moral approval; for example, on witnessing any breach of custom or infringement of tabu a Kayan would say NUSI TEKAP; TEKAP, in short, is applicable to whatever is as it ought to be.

Specialised terms for moral qualities of character and conduct are, however, not lacking. A just and wise chief would be said to be TENANG; but this word implies less purely a moral quality than our word justice and more of

intellectual capacity or knowledge or accuracy; the word is more especially applied as a term to describe the quality of a political speech which meets with approval. The word HAMAN means skilful, or clever, or cunning, in the older sense of capable both physically and intellectually. A man who fights pluckily is said to be MAKANG, and the same word is applied to any daring or dashing feat, such as crossing the river when it is dangerously swollen. To disregard omens would be MAKANG also; it seems, therefore, to have the flavour of the word rash or foolhardy.

SAIOH means good in the sense of kindly, pleasantly toned, or agreeable. JAAK is bad in the sense of a bad crop or an unfortunate occurrence, or a sore foot, I.E. it conveys no moral flavour. Morally bad is expressed by SALA; this is used in the same sense in Malay and may well be a recently-adopted word. In general the language seems to be very poor in terms expressive of disapproval, adverse judgments being generally expressed by putting nusi, the negative or primitive particle, before the corresponding word of positive import; thus a cowardly act or man would be denounced as NUSI MAKANG.

We think it is true to say that, although they thus distinguish the principal qualities of character and conduct with appropriate adjectival terms, they have no substantival terms for the virtues and vices, and that they have not fully accomplished the processes of abstraction implied by the appropriate use of such highly abstract substantives.

As regards the influence of their religious beliefs on the moral conduct of the Kayans, we have seen that the fear of the TOH serves as a constant check on the breach of customs, which customs are in the main salutary and essential for the maintenance of social order; this fear does at the least serve to develop in the people the power of selfcontrol and the habit of deliberation before action. The part which the major spirits or gods are supposed to play in bringing or fending off the major calamities remains extremely vague and incapable of definition; in the main, faithful observation of the omens, of rites, and of custom generally, seems to secure the favour of the gods, and in some way their protection; and thus the gods make for morality. Except in regard to that part of conduct which is accurately prescribed by custom and tradition, their influence seems to be negligible, and the high standard of the Kayans in neighbourliness, in mutual help and consideration, in honesty and forbearance, seems to be maintained without the direct support of their religious beliefs.

The high moral level attained by individuals among the Kayans and Kenyahs, and less frequently by Klemantans, is, we think, best exemplified by the enlightened and public-spirited conduct of some of the principal chiefs. It might have been expected that the leading chiefs of warlike and conquering peoples like the Kayans and Kenyahs, which, until the advent of the European governments, had never encountered any resistance which they could not break down by armed force, would have been wholly devoted to conquest and rapine; and that a chief who had acquired a high prestige and found himself able to secure the adhesion in war of a number of other chiefs and their followers would have been inspired with the barbarous ideals of an Alexander, a Napoleon, a Chaka, or a Cetewayo. But though some of them have shown tendencies of this kind, there have been notable exceptions who have recognised that chronic hostility, distrust, and warfare, which had always been characteristic of the relations between the various tribes and villages, were an unmixed evil. Such men have used their influence consistently and tactfully and energetically to establish peaceful relations between the tribes. Unlike some savage chieftains of warrior tribes in other parts of the world, such as some of those produced by the Bantu race, or those who established the great confederation of the Iroquois tribes, they have not sought merely to bring about the combination of all the communities of their own stock in order to dominate over or to exterminate all other tribes. They have rather pursued a policy of reconciliation and conciliation, aiming at establishing relations of friendship and confidence between the communities of all languages and races. One such powerful Kenyah chief of the Baram district, Laki Avit, had earned a high reputation for such statesmanship before the district was incorporated in the Raj of Sarawak. His policy was to bring about intermarriages between the families of the chiefs and upper-class people of the various tribes. Tama Bulan (see Pl. 27), the leading Kenyah chief of the same district at a later time, spared no efforts to bring about friendly meetings between chiefs of different tribes, for the purpose of making peace and of promoting intercourse and mutual understanding.[181] It should be added that these peacemaking ceremonies are generally of lasting effect; the oaths then taken are respected even by succeeding generations. Tama Kuling, who a decade ago was the most influential of the Batang Kayan chiefs, had also spontaneously pursued a similar policy.[182]

It has been said of many savage peoples that they recognise no natural death, but believe that all deaths not

due to violence are due to black magic. No such statement can be made of the Kayans; few, if any, deaths are ascribed by them to the efforts of sorcerers. Natural death is recognised as inevitable in old age, and disease is vaguely conceived as the effect of natural causes; though as to what those natural causes are they have no definite ideas. This attitude is shown by their readiness to make use of European drugs and of remedies for external application. Quinine for fever, and sulphate of copper for the treatment of yaws, are most in demand. Cholera and smallpox are the great epidemic diseases which have ravaged large areas of Borneo from time to time. The Kayans recognise that both these diseases spread up river from village to village, and that to abstain from intercourse with all villages lower down river and to prevent any one coming up river contributes to their immunity. With this object the people of a tributary stream will fell trees across its mouth or lower reaches so as to block it completely to the passage of boats, or, as a less drastic measure, will stretch a rope of rattan from bank to bank as a sign that no one may enter (Pl. 183). Such a sign is generally respected by the inhabitants of other parts of the river-basin. They are aware also of the risk of infection that attends the handling of a corpse of one who has died of epidemic disease, and they attempt to minimise it by throwing a rope around it and dragging it to the graveyard, and there burying it in a shallow grave in the earth, without touching it with the hands.[183]

The Kayans have some slight knowledge of the medicinal properties of some herbs, and make general use of them. They administer as an aperient a decoction of the leaves of a certain plant, called OROBONG, which they cultivate for the purpose on their farms. The root of the ginger plant is used both internally and for external application. A variety of vegetable products are used in preparing liniments; the basis most in request for these is the fat of the python and of other snakes, but wild pig's fat is used as a more easily obtainable substitute.

There is a small common squirrel (SCIURUS EXILIS), the testicles of which are strikingly large in proportion to his body. These organs are dried and reduced to powder, and this powder, mixed with pig's fat, is rubbed over the back and loins in cases of impotence.[184]

Kayan mothers treat colic in their children by chewing the dried root of a creeper (known as PADO TANA) with betel nut, and spitting out the juice on the belly of the patient.

Some of the coastwise Klemantans make use of a bitter decoction of a certain creeper as a remedy for jungle fever. It is asserted by Kayans and others that the Punans make use of the poison of the IPOH tree (the poison used on their darts) as an internal remedy for fever. It is said also (probably with truth, we think) that the Punans also apply the IPOH poison to snake-bites and to festering wounds.[185]

#### Surgery

Broken limbs are bound round with neat splints made of thin slips of bamboo tied in parallel series. Little effort is made to bring the broken ends of the bones into their proper positions or to reduce dislocations. Abscesses are not usually opened with the knife, but are rather encouraged to point, and are then opened by pressure. A cold poultice of chopped leaves is applied to a bad boil or superficial abscess, and it is protected from blows and friction by a small cage of slips of rattan. Festering wounds are dressed with the chewed leaves or the juice of the tobacco plant, or are washed with a solution of common salt. But a clean wound is merely bound up with a rag; or, if there is much haemorrhage, wood ashes are first applied. They practise no more efficient methods for arresting haemorrhage.

Headache is treated by tugging the hair of the scalp in small bundles in systematic order. Massage of the muscles is practised for the relief of pain, and massage is applied to the abdomen in cases of obstinate constipation; in certain cases they claim to break up hard lumps in the belly by squeezing them with the hands. Bodily aches and fatigue are relieved by pulling and bending the parts of the limbs until all the joints crack in turn.

Cupping is perhaps the most frequently practised surgical operation. Severe internal bruising from falls or heavy blows is the usual occasion. The operation is performed by scratching the skin with the point of a knife, and then applying the mouth of a bamboo cup previously heated over the fire. The cup is a piece of bamboo some five or six inches in length and an inch or rather more in diameter. Its edge is thinned and smoothed. Several of these may be simultaneously applied in a case of extensive bruising. Since this operation, like tatuings, involves the shedding of blood, some small offering, such as a few beads, must be made to the patient by the operator.

The Kayans have distinct numerals up to ten (JI, DUA, TELO, PAT, LIMER, NAM, TUSU, SAYA, PITAN, PULU). Those from eleven to nineteen are formed by prefixing PULU (= ten) to the names of the digits; and those from twenty to twenty-nine by prefixing DUA PULU (= two twenty); and so on up to JI ATOR (= one

hundred). Two hundred is DUA ATOR, three hundred is TELO ATOR, and so on up to MIBU (= one thousand). All or most of the other tribes (except the Punans) have a similar system of numerals, though the numbers beyond the first ten are little used. In counting any objects that cannot be held in the hand or placed in a row, the Kayan (and most of the other peoples) bends down one finger for each object told off or enumerated, beginning with the little finger of the right hand, passing at six to that of the left hand, and then to the big toe of the right foot, and lastly to that of the left foot. When all the names or objects have been mentioned, he holds the toe reached until he or some one else has told off the number; if the number was, say, seventeen, he would keep hold of the second toe of the left foot until he had counted up the number implied by that toe, either by means of counting or by adding up five and five and five and two; unless the count ends on the little toe of the left foot, when he knows at once that the number is twenty. If a larger number than twenty is to be counted, as when, for example, a chief has to pay in tax for each door of his house, he calls in the aid of several men, who sit before him. One of these tells off his fingers and toes as the chief utters the names of the heads of the rooms; and when twenty have been counted in this way, a second man begins on his fingers, while the first continues to hold on to all his toes. A third and a fourth man may be used in the same way to complete the count; and when it is completed, the total is found by reckoning each man as two tens, and adding the number of fingers and toes held down by the last man. The reckoning of the tens is done by addition rather than multiplication. Both multiplication and division are almost unknown operations.

When a chief is getting ready to pay in the door tax of two dollars a door, he does not count the doors and then multiply the number by two: he simply lays down two dollars for each door and pays in the lot, generally without knowing the sum total of the dollars. If a chief were told to pay in the tax for half his doors only, he would not know how to carry out the instruction. Subtraction is accomplished only in the most concrete manner, E.G. if a man wished to take away eight from twenty-five, he would count out twenty-five of the objects in question, or of bits of leaf or stick, then push away eight and count up the remainder. A dodge sometimes adopted, especially by the Kenyah, for counting the persons present, is to take a fern-leaf with many fronds, tear off a half of each frond, handing each piece to one of the men, until every man present affirms that he has a piece, and then to count the number of torn fronds remaining on the stalk.

It will thus be seen that the arithmetical operations of the Kayans are of an extremely concrete character; those of the other tribes are similar (with the exception again of the Punans, who do not count beyond three); though many of the Klemantans get confused over simple counting and reckoning, which the Kayans accomplish successfully.

Tama Bulan, the Kenyah chief whom we have had occasion to mention in several connections, obtained and learnt the use of an abacus from a Chinaman, and used it effectively. This deficiency in arithmetic is, however, no evidence of innate intellectual inferiority, and there seems to be no good reason to doubt that most of the people could be taught to use figures as readily as the average European; those children who have entered the schools seem to pick up arithmetic with normal rapidity.

The Sea Dayaks sometimes deposit sums of money with the Government officers, and they know accurately the number of dollars paid in; but when they withdraw the deposit, they generally expect to receive the identical dollars paid in by them.

#### Measurement

The Kayans use two principal standards of length, namely, the BUKA and the BUHAK. The former is the length of the span from finger-tip to tip of outstretched arms; the latter is the length of the span from tip of the thumb to tip of the first finger of the same hand. In buying a pig, for example, the price is determined by the number of BUHAK required to encircle its body just behind the forelegs. The half BUKA is also in general use, especially in measuring rattans cut for sale, the required length of which is two and a half BUKA. In order to express the half, they have adopted the Malay word STINGAH, having no word of their own.

Distances between villages are always expressed in terms of the average time taken by a boat in ascending the stream from one to the other. Distances by land are expressed still more vaguely; for example, the distance between the heads of two streams might be expressed by saying that, if you bathe in one, your hair would still be wet when you reach the other (which means about one hour); or a longer distance, by saying that if you started at the usual time from one of the places you would reach the other when the sun is as high as the hawk (which

means a journey from sunrise to about 10 A.M.), or when the sun is overhead (I.E. noon), or when it is declining (about 3 P.M.), or when the sun is put out (sunset), or when it is dark.

In order to describe the size of a solid object such as a fish, a Kayan would compare its thickness with that of some part of his body, the forearm, the calf of the leg, the thigh, or head, or the waist. In describing the thickness of the subcutaneous fat of a pig, he would mention one, two, three, or even four fingers.

#### Cosmological and Geographical Notions

The more intelligent Kayans can give a fairly good general description of the geographical features and relations of the district in which they live. In order to do this a Kayan will map out the principal features on a smooth surface by placing pieces of stick to represent the rivers and their tributaries, and pieces of leaf to represent the hills and mountains; he will pay special attention to the relations of the sources of the various streams. In this way a Kayan chief of the Baram would construct a tolerably accurate map of the whole Baram district, putting in Bruni and USUN APO and the heads of the Rejang, Batang Kayan, Tutong, and Balait rivers. He knows that all the rivers run to the sea, though few Kayans have seen the sea or, indeed, been outside the basin of their own river. To have been to another river, or to have seen the sea, is a just ground of pride. He does not know that Borneo is an island, though he knows that the white men and the Chinese come from over the sea; he will confidently assert that the sea is many times larger than the Baram river, even ten times as large. They seem to regard the sea as a big river of which their main river is a tributary.

Ibans sometimes speak of AIROPA (meaning Europe), which they take to mean the river Ropa, as the home of the white man; and all the tribesmen are apt to think of foreigners as living on the banks of rivers in forest-covered country much like their own.

Although the Kayans do not observe the stars and their movements for practical purposes, they are familiar with the principal constellations, and have fanciful names for them, and relate mythical stories about the personages they are supposed to represent (Chap. XVII.).[186] They seem to have paid no special attention to the planets. Inconsistently with the star myths, the stars are regarded as small holes in the floor of another and brighter world, and it is said that these holes have been made by the roots of plants which have penetrated through the soil of that world.

The sky is regarded as a dome which meets the earth on every hand, and this limiting zone is spoken of as the edge of the sky; but they have no notion how far away this edge may be; they recognise that, no matter how many days one travels in any one direction, one never gets appreciably nearer to it, and they conclude, therefore, that it must be very distant. They understand that the clouds are very much less distant than the sky, and that they merely float about the earth. Neither sun nor moon seems to be regarded as animated.

Two total eclipses of the sun have occurred in Borneo in the last half-century. These, of course, caused much excitement and some consternation.[187] The former of them serves as a fixed date in relation to which other events are dated.

The traditional lore of the Kayans provides answers of a kind to many of the deep questions that the spirit of enquiry proposes whenever man has made provision against the most urgent needs of his animal nature. Yet the keener intelligences among them do not rest satisfied with these conventional answers; rather, they ponder some of the deepest questions and discuss them with one another from time to time. One question we have heard debated is — Why do not the dead return? Or rather, Why do they become visible only in dreams and even then so seldom? The meeting of dead friends in dreams generally leaves the Kayan doubtful whether he has really seen his friend; and he will try to obtain evidence of the reality of the REVENANT by prayer and by looking for a favourable answer in the liver of a pig, the entrails of a fowl, or in the behaviour of the omen birds. They argue that persons who have been much attached to their relatives and friends would surely return to visit them frequently if such return were at all possible.

The relation of the sky to the earth remains also an open and disputed question. One of us well remembers how, when staying in a Kenyah house, he was approached by a group of youths who evidently were debating some knotty problem, and how they very seriously propounded the following question: — If a dart were shot straight up into the air and went on and on, what would become of it? Would it come up against the sky and be stopped by it?

The whereabouts of the home of the white men, and how long is spent on the journey thither, are questions



often raised. Tama Bulan once raised the question of the motion of the sun, and having been told that really the earth revolves and that the sun only appears to move round it, he argued that this could hardly be, since we see the sun move every day. For a long time he said nothing more on this topic to us, but it continued to occupy his mind; for some years later he recurred to it and announced that he now accepted the once incredible doctrine, because he had inquired concerning it of every European he had been able to meet, and all had given him the same answer.

The methods of argument of the Kayans are characteristic and worthy of a short description. As we have said, they are great talkers and orators. They are by no means an impulsive people; far less so than the Kenyahs or the Sea Dayaks. Although they are not a vivacious or talkative people in general intercourse, every undertaking of any importance is carefully discussed in all its aspects, often at what we should consider unnecessary length, before the first step is taken; and in such discussions each man likes to have his say, and each is heard out patiently by his fellows. They have a strong belief in the efficacy of words; this is illustrated by the copious flood of words which they pour out whenever they perform any religious or other rite.

In arguing or persuading, or even threatening, they rely largely on indirect appeals, on analogy, simile, and metaphor, flavoured with a good deal of humour of a rather heavy kind. Or they may convey a strong hint by describing a professed dream in which the circumstances under discussion are symbolised.

The following incident illustrates this mode of speech. Two Kayans quarrelled over the sale of a pig. The current price was a dollar a BUHAK (I.E. the span from finger-tip to thumb-tip, see vol. ii. p. 212). The buyer had insisted on measuring it by spans from thumb to tip of second finger, whereas the customary span is to the tip of the index finger. The case was brought before the chief, who of course might have contented himself, but not perhaps the purchaser, by authoritatively laying down the law of custom. He, therefore, being a man of tact and experience, thrust out his second finger and pointed it at the purchaser of the pig, saying, "Suppose any one pointed at you like that, instead of with the index finger; you would all laugh at him." All the people sitting round laughed, and the purchaser went away convinced of the propriety of using the index finger in measuring a pig.

To illustrate the way in which a chief may exert influence in matters in which he has no footing for the exercise of formal authority, we cite the following bit of history. It is an ancient custom of the Kayans to have in the house a very large LAMPIT (the mat made of parallel strips of rattan), the common property of the household, which is spread on the occasion of the reception of visitors to serve as a common scat for guests and hosts. The Kayans of the Baram, under the individualising influences of trade and increasing stocks of private property, neglected to renew these communal mats; and thus the good old custom was in danger of dying out. This was observed with regret by an influential chief, who, therefore, found an opportunity to relate in public the following story. "A party of Kayans," he said, "once came over from the Batang Kayan to visit their relatives in the Baram. The latter dilated upon the benefits of the Rajah's government, peace, trade, and the possibility of fine dress for themselves and their wives and of many other desirable acquisitions, all for the small annual payment of two dollars a door. The visitors looked about them and confessed that they still had to be content with bark clothing, bamboo cups, and wooden dishes; 'but,' they added, 'if you come to our house you will at least find on the floor a good LAMPIT on which we can all sit together.' " The story quickly went the round of the Kayan villages in the Baram, with the result that large LAMPITS quickly came back into general use and the good old custom was preserved.

The Kayans have a keen sense of humour and fun. As with ourselves, the most frequent occasions of laughter are the small mishaps that happen to one's companions or to oneself; and practical jokes are perpetrated and appreciated. For example, at the time when the wild pigs were dying in large numbers, a boat-load of Kayans working up-river encountered a succession of pigs' carcasses floating down, most of them in a state of decomposition and swollen with gases. A practical joker at the bow conceived the notion of prodding the carcasses with his spear and thus liberating the foul-smelling gases for the benefit of those who sat in the stern of the boat, to their great disgust and the amusement of those on the forward benches. Again --- a Klemantan example --- a chewer of betel-nut and lime sometimes prepares several quids wrapped carefully in SIRIH leaf, and sets them aside till they are required. On one occasion, while the crew of a boat landed to cook their dinner, a youngster carefully opened such a quid and substituted a piece of filth for the betel-nut. When the victim of the joke spat out the morsel, spluttering with disgust and anger, the crew was moved to loud laughter, which they tried in vain to suppress out of consideration for the feelings of the victim; for no one likes to be laughed at.

But, although the Kayans have a strong sense of the ridiculous, their laughter is not so violent and

uncontrollable as that of Europeans is apt to be, and it is not so apt to recur from time to time at the mere recollection of an amusing incident.

We refer to some of the stories reproduced in Chapter XVII. as examples of the less crude forms of humour appreciated by the people. These stories are repeated again and again, without failing to amuse those who are perfectly familiar with them. AEsop's fables transposed into a Bornean key were, we found, much appreciated. In a large proportion of the entertaining stories of the Kayans, as well as of the other tribes, the point of the story depends on some reference to sexual relations or actions. But such references are not, as a rule, coarsely put, but rather hinted at merely, often in a somewhat obscure way; E.G. such a story may terminate before the critical point is reached with some such phrase as "Well, well, what of it?" and a shrug of the shoulders.

The tendency of the Kayans to laconic speech is well illustrated by their way of referring to well-known stories or fables with one or two words, in order to sum up or characterise a situation — much as we say "sour grapes!"

Like all other varieties of mankind (some few savage tribes perhaps excepted), the Kayans and other tribes are apt to distort the truth in their own favour, in describing from memory incidents that seriously affect their interests. When a party has allowed itself to commit some reprehensible action, such as over-hasty and excessive reprisals, a whole village, or even several villages, may conspire together more or less deliberately to "rig up" some plausible version of the affair which may serve to excuse or justify the act in the eyes of the government. A good PENGHULU[188] will set about the investigation of such an affair with much tact and patience. He will send for those immediately concerned and patiently hear out their version of the incident. If it departs widely from the truth, he will find reason to suspect the fact. But, instead of charging the men with untruthfulness, or attempting to extort the truth by threats, or bullying, or torture (as is so often done in more highly civilised courts), he keeps silence, shrugs his shoulders, and tells them to go away and think it over, and to come back another day with a better story. In the meantime he hears the version of some other group, who view the affair from a different angle, and thus puts himself in a position to suggest modifications of the new version of the former group. When he has in this way gathered in a variety of accounts of the incident, he find himself in a position to construct, by a process of moral triangulation, an approximately correct picture; this he now lays before the party immediately concerned, who, seeing that the game is up, fill in the details and supply minor corrections. Throughout this process the tactful PENGHULU never shuts the door upon his informants or tries to pin them down to their words, or make them take them back; rather he keeps the whole story fluid and shifting, so that, when the true account has been constructed, the witnesses are not made to feel that they have lost their self-respect.

It seems worth while to describe here one of a large class of incidents which illustrate at the same time the workings of the native mind and the way in which an understanding of such workings may be applied by the administrator. The Resident of the Baram having heard of the presence in the central no-man's land of a considerable population of Kenyahs under a strong chief, TAMA KULING, sent friendly messages to the latter. He responded by sending a lump of white clay, which meant that he and his people recognised that they were of the same country as the people of the Baram and that their feelings were friendly; and with it came an elaborately decorated brass hook (Pl. 184), which was to serve as a complimentary and symbolical acknowledgment of the white man's power of binding the tribes together in friendship. He sent also a verbal message acknowledging his kinship with the Kenyahs of the Baram; but he added that he and his people were in the dark and needed a torch (I.E. they wanted more explicit information about the conditions obtaining in the Baram). In reply to these representations, the Resident despatched trusty messengers to TAMA KULING bearing the following articles: a large hurricane lamp for TAMA KULING, and smaller ones for the other principal chiefs of the district: smaller lamps again were sent for the heads of houses, and with them a large stock of boxes of lucifer matches, which were to be dealt out to the heads of the rooms of each house. In this way the desired torch was provided for every member of their communities. With these symbols went a large horn of the African rhinoceros, out of which TAMA KULING might fashion a hilt for his sword.[189]

We were afterwards informed that, on the arrival of these symbolic gifts, TAMA KULING called together the chiefs of all the surrounding villages to receive their share, and to discuss the advisability of accepting the implied invitation to migrate into the Baram. The proposition was favourably received, and a large proportion of the population of that region have since acted upon the resolution then taken.

## Pagan Tribes of Borneo, V1

To the disjointed collection of remarks which make up this chapter we venture to add the following observations. It has often been attempted to exhibit the mental life of savage peoples as profoundly different from our own; to assert that they act from motives, and reach conclusions by means of mental processes, so utterly different from our own motives and processes that we cannot hope to interpret or understand their behaviour unless we can first, by some impossible or at least by some hitherto undiscovered method, learn the nature of these mysterious motives and processes. These attempts have recently been renewed in influential quarters. If these views were applied to the savage peoples of the interior of Borneo, we should characterise them as fanciful delusions natural to the anthropologist who has spent all the days of his life in a stiff collar and a black coat upon the well-paved ways of civilised society.

We have no hesitation in saying that, the more intimately one becomes acquainted with these pagan tribes, the more fully one realises the close similarity of their mental processes to one's own. Their primary impulses and emotions seem to be in all respects like our own. It is true that they are very unlike the typical civilised man of some of the older philosophers, whose every action proceeded from a nice and logical calculation of the algebraic sum of pleasures and pains to be derived from alternative lines of conduct; but we ourselves are equally unlike that purely mythical personage. The Kayan or the Iban often acts impulsively in ways which by no means conduce to further his best interests or deeper purposes; but so do we also. He often reaches conclusions by processes that cannot be logically justified; but so do we also. He often holds, and upon successive occasions acts upon, beliefs that are logically inconsistent with one another; but so do we also.

## CHAPTER 21. Ethnology of Borneo

In the foregoing chapters it has been shown that the six groups which we have distinguished by the names Kayans, Kenyahs, Klemantans, Muruts, Nomads or Punans, and Ibans or Sea Dayaks, differ considerably from one another in respect of material and moral culture as well as of mental and physical characters. We have used these names as though the groups denoted by them were well defined and easily to be distinguished from one another. But this is by no means the case. Our foregoing descriptions are intended to depict the typical communities of each group, those which present the largest number of group-marks. Besides these more typical communities, which constitute the main bulk of the population, there are many communities or sub-tribes which combine in some measure the characteristics of two or more of the principal groups. It is this fact that renders so extremely difficult the attempt to classify the tribes and sub-tribes in any consistent and significant fashion, and to which is largely due the confusion that reigns in most of the accounts hitherto given of the inhabitants of Borneo. We believe, however, that the divisions marked by the six names we have used, namely, Kayan, Kenyah, Klemantan, Murut, Punan, and Iban, are true or natural divisions; and that the intermediate forms are due, on the one hand, to crossing through intermarriage, which takes place continually in some degree, and, on the other hand, to the adoption of the customs and beliefs and traditions and to the imitation of the arts and crafts of one natural group by communities properly belonging to a different group. The main groups seem to us to be separated from one another by differences of two kinds: some by racial or ethnic differences, which involve differences of physical and mental constitution, as well as by cultural differences; others by differences of culture only, the racial characters being hardly or not at all differentiated.

We propose in this chapter to attempt to justify these main distinctions, and to define more nearly their essential nature and grounds. This attempt must involve the statement of our opinion as to the ethnic affinities of all the principal tribes. We are fully aware that this statement can be only of a provisional nature, and must be liable to modification and refinement in the light of further observation and discussion. But we think that such a statement may serve a useful purpose; namely, that it may serve as a basis upon which such corrections and refinements may later be made.

The most speculative part of this statement must necessarily be that which deals with the affinities of the tribes of Borneo with the populations of other areas; but even here we think it better to set down our opinion for what it may be worth, not concealing from the reader its slight basis. We state in the following paragraph the main features of the history of the tribes of Borneo as we conceive it.

The wide distribution of remnants of the Negrito race in the islands round about Borneo and in the adjacent parts of the mainland of Asia renders it highly probable that at a remote period Negritos lived in Borneo; but at the present time there exist no Negrito community and no distinct traces of the race, whether in the form of fossil remains or of physical characters of the present population, unless the curly hair and coarse features of a few individuals to be met with in almost all the tribes may be regarded as such traces. These negroid features of a small number of the present inhabitants are perhaps sufficiently accounted for by the fact that slaves have been imported into Borneo from time to time throughout many centuries by Arabs and Malays and by the Illanum pirates; and some of these slaves were no doubt Negritos, and some, possibly, Africans or Papuans.[190]

We leave open the question of an ancient Negrito population, and go on to the statement that the present population is derived from four principal sources. From a very early period the island has been inhabited in all parts by a people of a common origin whose surviving descendants are the tribes we have classed as Klemantans, Kenyahs, and Punans. This people probably inhabited Borneo at a time when it was still connected with the mainland. Their cultural status was probably very similar to that of the existing Punans. It seems not improbable that at this early period, perhaps one preceding the separation of Borneo, Sumatra, and Java from the mainland, this people was scattered over a large part of this area. For in several of the wilder parts, where the great forest areas remain untouched, bands of nomads closely resembling the Punans of Borneo are still to be found, notably the Orang Kubu of Sumatra, and perhaps the Bantiks of northern Celebes. The principal characteristics of this

primitive culture are the absence of houses or any fixed abode; the ignorance of agriculture, of metal-working, and of boat-making; and the nomadic hunting life, of which the blow-pipe is the principal instrument. The chief and only important improvement effected in the condition of the Punans since that early period would seem to be the introduction of the superior form of blow-pipe of hard wood. This cannot be made without the use of a metal rod for boring, and, since none of the Bornean tribes which still lead the nomad life know how to work metals, it may be inferred that they have learnt the craft of making the SUMPITAN from more cultured neighbours, procuring from them by barter the iron tools required — as they still do.

It is impossible to make any confident assertion as to the affinities of this widely diffused people from which we believe the Punans, Kenyahs, and Klemantans to be descended. But the physical characters of these tribes, in respect of which they differ but slightly from one another, lead us to suppose that it was formed by a blending of Caucasian and Mongoloid elements, the features of the former predominating in the race thus formed. The fairness of the skin, the wavy and even, in some individuals, the curly character of the hair; the regular and comparatively refined features of many individuals; the frequent occurrence of straight and aquiline noses; the comparatively large, horizontal, or only slightly oblique, palpebral aperture; the not infrequent absence of all trace of the Mongolian fold of the eyelid and its slightness when present — all these characters point to the predominance of the Caucasian element in the ethnic blend.

On the other hand, the smooth yellowish skin, the long dark thick hair of the scalp, and the scantiness of the hair on the cheeks, chin, and lips; the rather broad cheek-bones, the prevailing slight obliquity of the eyes, the rather narrow palpebral aperture, and the presence of a slight Mongolian fold — these characters (all of which are found in a considerable proportion of these peoples) are features that point to Mongol ancestry.[191]

It was said above that the skin of these tribes is of very pale yellow colour. In this respect there is little to choose between them, but on the whole the Punans are of rather lighter colour than the others, and, as was said before, of a faintly green tinge. This difference is, we think, sufficiently accounted for by the fact that the Punan seldom or never exposes himself to full sunlight, whereas the others are habitually sun-browned in some degree. But the lighter colour of this whole group of tribes (as compared especially with the Kayans and Ibans) cannot be explained in this way; for the habits and conditions of life of Kenyahs and Klemantans are very closely similar to those of the Kayans; and it must, we think, be regarded as a racial character.

The name Indonesian is perhaps most properly applied to this people which we suppose to have resulted from the contact and blending of the Caucasian and Mongoloid stocks in this corner of Asia. The systematic ethnographers use this term in a vague and uncertain manner. Deniker defines the Indonesians by saying that they comprise "the little intermixed inland populations of the large islands (Dyaks of Borneo, Battas of Sumatra, various "Alfurus" of Celebes, and certain Moluccas)."[192] He seems doubtful whether the name Indonesian should be applied to the eight groups of aborigines of Indo-China which he distinguishes.[193] He recognises that the Indonesians and the Malays are of very similar physical characters, but distinguishes them as two of four races which have given rise to the population of the Malay Archipelago — namely, Malays, Indonesians, Negritos, and Papuans. He regards the Indonesians (used in a wide sense to include Malays) as most closely akin to the Polynesians; but he expresses no opinion as to their relations to the Mongol and Caucasian stocks.

Keane describes the Indonesians as a Proto-Caucasian race which must have occupied Malaysia and the Philippines in the New Stone Age. He separates them widely from the Malays and Proto-Malays, whom he describes as belonging to the Oceanic branch of the Mongol stock;[194] and the "Dyaks" of Borneo are classed by him with strict impartiality sometimes with the Proto-Malays, sometimes with the Proto-Caucasians.

If these oldest inhabitants of Borneo may be regarded as typical Indonesians (and we think that they have a strong claim to be so regarded), then we think that the usage of the term by both Keane and Deniker errs in accentuating unduly the affinity of the Indonesians with the Polynesians, and that Keane's errs also in ignoring the Mongol affinities of the Indonesians.

The most plausible view of the relations of these stocks seems to us to be the following. Polynesians and Indonesians are the product of an ancient blend of southern Mongols with a fair Caucasian stock. In both the Caucasian element predominates, but more so in the Polynesian than in the Indonesian. We imagine this blending to have been effected at a remote period in the south-eastern corner of Asia, probably before the date at which Borneo became separated from the mainland. If, as seems probable, this blending was effected by the infusion of successive doses of Mongol blood from the north into a Caucasian population that had previously diffused itself

over this corner of Asia from the west,[195] the smaller proportion of the Mongol element in the Polynesians may be due to their having passed into the islands, while the Indonesians remained on the continent receiving further infusions of Mongol blood.

The separation of Borneo from the mainland then isolated part of the Indonesian stock within it, at a period when their culture was still in a very primitive condition, presumably similar to that of the Punans. The Proto-Malays, on the other hand, represent a blending of the Mongol stock (or of a part of the Indonesian race) with darker stock allied to the Dravidians of India, which is perhaps properly called Proto-Dravidian, and of which the Sakai of the Malay peninsula (and, perhaps, the Toala of central Celebes) seem to be the surviving representatives in Malaysia. In this blend, which presumably was effected in an area south of that in which the Indonesian blend was formed, the Mongol element seems to predominate.

After the separation of Borneo from the mainland, there came a long period throughout which it remained an isolated area, the population of which received no important accessions from other areas. It is probable that during this period the Indonesian population of the mainland continued to receive further infusions of Mongol blood; for there is abundant evidence that for a long time past there has been a drifting of Mongol peoples, such as the Shans, southwards from China into the Indo-Chinese area.

We may suppose that during this period the knowledge and practice of working iron, of building long houses and boats, and of cultivating PADI, became diffused through the greater part of the population of this corner of the Asiatic continent. This advance of culture would have rendered possible the passage of these peoples to the islands in boats. But it seems probable that no considerable incursion of people from this area was effected until a comparatively recent date.

In Chapter II. we have mentioned the evidences of Hindu-Javan influence on Borneo, to which must be ascribed the existence of the Buddhist court at Bruni before the coming of the Malays, as well as traces of Hindu culture in south Borneo, including the practice of cremation by the Land Dayaks, the burning of the bones by other tribes, stone carvings,[196] and articles of gold and fragments of pottery of Hindu character. There must have been a certain infusion of Javanese and perhaps Hindu blood at this time; but both in physical type and in culture the surviving traces seem to be insignificant.

We have mentioned also in Chapter II. the early intercourse between China and the Buddhist rulers of Bruni and other parts of north and northwest Borneo, and the legend of an early settlement of Chinese in the extreme north.

But these civilised or semi-civilised visitors and settlers were separated from the indigenous Borneans by a great culture gap, and they probably had but little friendly intercourse with them and affected their culture but little, if at all; and though it is possible that they bartered salt, metal, tools, and weapons, for camphor and other jungle produce, their influence, like that of the Malays, probably extended but a little way from the coasts in most parts of the island. The higher culture of the indigenous tribes of the interior has been introduced, we believe, by invasions of peoples less widely separated from them in cultural level, who have penetrated far into the interior and have mingled intimately with them. Three such invasions may be distinguished as of principal importance: that of the Kayans in the south and perhaps in the south-east, of the Muruts in the north, and of the Ibans in the south-west. Each of these three invading populations has spread up the course of the rivers to the interior and has established its communities over large areas, until in the course of the nineteenth century they have encountered one another for the first time. Besides these three most numerous and important invasions, there have been many smaller settlements from the surrounding islands, especially from Java, Celebes, and the Philippines, whose blood and culture have still further diversified the population and culture of the tribes of Borneo and complicated the ethnographical problems of the island.

Of the three principal invasions, that of the Kayans has been of most effect in spreading a higher culture among the indigenous population.

There is good reason to believe that the Kayans have spread across Borneo from the south and south-eastern parts, following up the course of the large rivers until they reached USUN APO, the central highlands, in which (see vol. i. p. 2) all the large rivers have their sources. The tradition of such north-westward migration is preserved among the Kayans of the Baram, who, according to their own account, crossed the watershed into the basins of the western rivers only a few generations ago. This tradition is in accordance with the fact that, within the memory of men still living, they have spread their villages farther westward along the banks of the Baram and

the Rejang rivers, driving back the Muruts northwards from the Baram. It is borne out by the accounts of the Bruni Malays to the effect that the Brunis first became acquainted with the Kayans some few generations ago, and had known the Muruts long before the advent of the Kayans; and further, by the fact that the Kayans have left their name attached to many rivers both in the south and east, where the name Batang Kayan (or Kayan River) is the common appellation of several rivers on which Kayan villages are now very few.

The Kayans seem to have entered Borneo by way of the rivers opening on the south coast, and gradually to have penetrated to the central highlands by following up these rivers, pushing out communities every few years to build new villages higher up the river in the course of their unceasing search for new areas adapted to their wasteful farming operations.

There can, we think, be little doubt that the Kayans are the descendants of emigrants from the mainland, and that they brought with them thence all or most of the characteristic culture that we have described. But from what part exactly of the mainland, and by what route, they have come, and how long a time was occupied by the migration, are questions in answer to which we cannot do more than throw out some vague suggestions.

We believe that the Kayans migrated to Borneo from the basin of the Irrawadi by way of Tenasserim, the Malay Peninsula, and Sumatra; and that they represent a part of the Indonesian stock which had remained in the basin of the Irrawadi and adjacent rivers from the time of the separation of Borneo, there, through contact with the southward drift of peoples from China, receiving fresh infusions of Mongol blood; a part, therefore, of the Indonesians which is more Mongoloid in character than that part which at a remote period was shut up in Borneo by its separation from the mainland. During this long period the Kayans acquired or developed the type of culture characterised by the cultivation of PADI on land newly cleared of jungle by burning, the building of long houses on the banks of rivers, the use of boats, and the working of iron.

The way in which in Borneo the Kayans hang together and keep touch with one another, even though scattered through districts in which numerous communities of other tribes are settled, preserving their characteristic culture with extreme faithfulness, lends colour to the supposition that the whole tribe may thus have been displaced step by step, passing on from one region and from one island to another without leaving behind any part of the tribe. The passage of the straits between the Peninsula and Sumatra, and between Sumatra and Borneo, are the parts of this tribal migration that are the most difficult to imagine. But we know that Kayans do not fear to put out to sea in their long war-boats. We have known Kayan boats to descend the Baram River and to follow the coast up to Bruni; and we have trustworthy accounts of such expeditions having been made in former days by large war parties in order to fight in the service of the Sultan of Bruni. The distance from the Baram mouth to Bruni (about 100 miles) is nearly equal to the width of the broadest stretch of water they must have crossed in order to have reached Borneo from the mainland by way of Sumatra. This hypothetical history of the immigration of the Kayans receives some support from the fact that a vague tradition of having crossed the sea still persists among them. We attach some importance to this Kayan tradition of their having come over the sea, as evidence that they are comparatively recent immigrants to Borneo; but the principal grounds on which we venture to suggest this history of the Kayans and of their invasion of Borneo are three: first, the affinities of the Kayans in respect of physical character and culture to certain tribes still existing in the area from which we believe them to have come; secondly, historical facts which go far to explain such a migration; thirdly, their relations to other tribes of Borneo. We add a few words under each of these heads.

I. As long ago as the year 1850, J. R. Logan, writing of highland tribes of the basins of the Koladan and Irrawadi and the south-eastern part of the Brahmaputra, asserted that "the habits of these tribes have a wonderful resemblance to those of the inland lank-haired races of Indonesia... . There is hardly a minute trait in the legends, superstitions, customs, habits, and arts of these tribes, and the adjacent highlanders of the remainder of the Brahmaputra basin, that is not also characteristic of some of the ruder lank-haired tribes of Sumatra, Borneo, the Philippines, Celebes, Ceram, and the trans-Javan islands." [197]

This assertion, though, no doubt, rather too sweeping, seems to have a large basis in fact, so far as it concerns the tribes of Borneo.

We have not been able to find that any one tribe of this part of the mainland agrees closely with the Kayans in respect of physical characters and all important cultural features. Nevertheless, very many of the features of the Kayan culture are described as occurring amongst one or another tribe, though commonly with some considerable differences in detail. In attempting to identify the nearest relatives of the Kayans among the mainland tribes, it has

to be remembered that all these have been subjected to much disturbance, in some cases, no doubt, involving changes of habitat, since the date at which, as we suppose, the Kayans left the continent. And since the Kayans, from the time of their arrival in Borneo, have played the part of a dominating and conquering people among tribes of lower culture, and have imposed their customs upon these other tribes, without blending with them or accepting from them any important cultural elements, it follows that we must regard the Kayans as having preserved, more faithfully than their relatives of the mainland, the culture which presumably they had in common with them a thousand years or more ago.

Of all the peoples of the south-eastern corner of the continent, the one which seems to us most closely akin to the Kayans is that which comprises the several tribes of the Karens.[198] These have been regarded by many authors (3) as the indigenous people of Burma. Their own traditions tell of their coming from the north across a great river of sand and of having been driven out of the basin of the Irrawadi at a later date (1). At present the Karens are found chiefly in the Karen hills of Lower Burma between the Irrawadi and the Salween and in the basin of the Sittang River, which runs southwards midway between those two greater rivers to open into the head of the Gulf of Martaban. But they have been much oppressed by their more civilised neighbours, the Burmese and the Shans, and their communities are widely scattered in the remoter parts of the country and are said to extend into Tenasserim far down the Malay Peninsula. By the Burmese they are called also KAYENS or KYENS, the Y and R sounds being interchangeable in Burmese (1 and 3).

Peoples generally recognised as closely akin to the KARENS are the CHINS (who are also known as Khyens) (14) of the basin of the Chindwin, the large western tributary of the Irrawadi; and the KAKHYENS (also called KACHINGS and SINGPHO), who occupy the hills east of Bhamo and the basin of the river Tapang in the borderlands of Burma and Yunnan (7). The Nagas of Manipur and of the Naga Hills of Assam also seem to belong to the same group of peoples, though less closely akin to the Karens than the Chins and the Kakhyens.

It seems highly probable that all these, together with the Kayans, are surviving branches of a people which occupied a large area of south-eastern Asia, more especially the basin of the Irrawadi, for a considerable period before the first of the successive invasions which have given rise to the existing Burmese and Shan nations. The physical characters of all of them are consistent with the view taken above, namely, that they represent the original Indonesian population of which the Klemantans of Borneo are the pure type, modified by later infusions of Mongol blood. In all these occur individuals who are described as being of almost purely Caucasian type and very light in colour.

Three principal tribes of Karens are distinguished, the Sgan, Pwo, and Bwe. Of these the Bwe are also known as the Hill-Karens and seem to have preserved their own culture more completely than the others, though the Sgan are said to be the purest in blood, the lightest in colour, and more distinctive in type than any other of the tribes of south-eastern Asia (4). Of the Hill-Karens, Mason said, "Some would be pronounced European. Indeed, if not exposed to the sun, some of them would be as fair, I think, as many of the inhabitants of northern Europe." Yet the commoner type of Karen is said to show distinctly Mongoloid facial characters. Of those Karens who have been least affected by their more cultured neighbours, we are told that they live in small communities, each of which is governed by a patriarch who is at once high priest and judge, and who punishes chiefly by the infliction of fines. He raises no regular tax, but receives contributions in kind towards the expenses of entertainment (3). Several communities join together, sometimes under a leading chief, in order to meet a common foe (3). They build long houses in which a whole community of as many as 400 persons dwell together (4). These houses are described as of Himalayan type. "It (the house) is made by sinking posts of large size firmly in the ground and inserting beams or joists through the posts eight feet from the ground, and on these laying the floor with slats of bamboo." The walls and partitions are mats of woven bamboo, and the roof is thatched with palm leaves (4). This very incomplete description leaves it open to suppose that the Karen house is very similar to that built by the Kayans when for any reason the latter build in hasty and temporary fashion. But the still more scanty description of another writer (3) implies that the arrangement of the interior of the house is unlike that characteristic of the Kayans. They frequently migrate to new sites.

The Karens cultivate PADI and prepare the jungle land for cultivation by burning down the forest. They prepare from rice a spirit to which they are much addicted. The hill tribes are truculent warriors and head-hunters. Captives are made slaves. They use and make spears and axes, and a cross-bow[199] with poisoned arrows. They rear pigs and poultry, and train dogs to the chase. The men eradicate their beards. They wear many small rings on



the forearms and legs. The lobes of the ear are perforated and often enormously distended (3).

They address prayers and supplications for protection and prosperity to a Supreme Being whom they address as "Lord of the heavens and earth" (5). They believe also in a multitude of nature spirits, most of whom are harmful. The fear of them occasions many ceremonial acts. The taking of heads is said to be a means of propitiating these spirits (3). They believe that during sickness the soul departs from the body; and the medicine-man attempts to arrest it and to bring it back to the body of the patient. In this and other rites the blood of fowls (which they are said to venerate) (2) is smeared on the participants. Divination by means of the bones of fowls and the viscera, especially the liver of the pig, is in common use (5). The souls of the dead go to a place in which they live much as in this world. It is called ABU LAGAN[200] (3). In this abode of shades everything is upside down and all directions are inverted (5). There are no rewards and punishments after death (3). Parents take the names of father and mother of So-and-so — the name of their first child. The knife with which the navel cord is cut at birth is carefully preserved (5). Finally, the Karens are said to be distinguished by a lack of humour, a trait which is well marked also in the Kayans.

In respect of all the characters and culture elements mentioned above, the Karens resemble the Kayans very closely. Against these we have to set off a few customs mentioned by our authorities in which they differ from the Kayans.

The Karens eat everything except members of the cat tribe. They bury the bodies of the dead after they have lain in state some three or four days; and they hold an annual feast for the dead at the August new moon. They ascribe two souls to man, one of a kind which is possessed also by animals, tools, weapons, the rice, and one which is the responsible soul peculiar to man.[201]

The bride is taken to the house of the bridegroom's father. Only one tribe, namely, the Red Karens, practises tatu, and among them a figure which seems to represent the rising sun is tatued on the back of the men only (5). They weave a coarse cloth.

These differences are not very great, and their significance is diminished by the following considerations. The Kayans may have acquired their aversion to killing the dog through contact with Malays. They bury the dead in the ground in the case of poor persons or those dead of epidemic disease. And they have a tradition that they formerly practised the weaving of cloth. They may also have acquired the art of making and using the solid wooden blow-pipe from Malays; and this would account for their having given up the use of the bow and arrow as a serious weapon. On the other hand, the inferior houses of the Karens, the lack of restrictions among them upon animal foods, their earth burial — all these may well be due to decay of custom among an oppressed people; and the fact that they seem to make but little use of boats may well be due to their having been driven away from the main rivers and pushed into the hills. We have little doubt that many more points of resemblance would be discoverable, if we had any full account of the Karens as they were before their culture was largely affected by contact with Burmese and Shans and by the influence of the missionaries who have taught so successfully among them for more than sixty years.

Among the elements of Kayan culture which are lacking or but feebly represented among the Karens, some are reported among the tribes most nearly allied to the Karens, and others among other peoples of the same area.

Thus the peculiar Kayan custom of tatuating the thighs of women has a close parallel in the tatuating of the thighs of men among all Burmese and Shans; and the Kayans may well have adopted the practice from them. Among the Shans there obtains the custom of placing the coffin on upright timbers at some height above the ground (9). Among the Nagas, and especially the Kuki Nagas,[202] who are said to be most nearly allied to the Karens, beside a number of the culture elements which we have noticed above as common to Karens and Kayans, other noteworthy points of resemblance to the Kayans are the following: A system of tabu or GENNA which may affect individuals or whole villages, and is very similar to the MALAN of the Kayans; the practice of ornamenting houses with heads of enemies, the motive of taking the head being to provide a slave in Hades for a deceased chief; the use of human and other hair in decorating weapons.[203]

Their method of attacking a village is like that of the Kayans, namely, to surround it in the night and to rush it at dawn; they obstruct the approach of an enemy to their village by planting in the ground short pieces of bamboo sharpened and fire-hardened at both ends; they use an oblong wooden shield or a rounded shield of plaited cane; their blacksmiths use a bellows very like that of the Kayan smiths; they husk their PADI in a solid wooden mortar with a big pestle A LA Kayan; they floor their houses with similar massive planks; they catch fish in nets and

traps, and by poisoning the water; men pierce the shell of the ear in various ways; omens are read from the viscera of pigs, and the cries of some birds are unlucky; they worship a Supreme Deity and a number of minor gods, E.G. gods of rain and of harvest; they often sacrifice pigs and fowls to the gods, and omens are always read from the slaughtered animals; those who die in battle and in childbirth are assigned to special regions of the other world; the women are tattooed (on chest) to facilitate recognition in Hades; in felling the jungle preparatory to burning it to make a PADI farm, they always leave at least one tree standing for the accommodation of the spirits of the place.

Other of the instruments, arts, and customs of the Kayans are found widely spread in south-eastern Asia. Such are the small axe or adze with lashed head; the musical instrument of gourd and bamboo pipes with reeds; the bamboo guitar; the use of old beads and of hornbill feathers for personal adornment; the making of fire by friction of a strip of rattan across a block of wood.

II. Whether this people, of whom the Kayans, Karens, Chins, Kakhyens, and Nagas, seem to be the principal surviving branches, came into the Irrawadi basin and adjacent areas by migration from Central Asia by way of the Brahmaputra valley, as Cross and McMahon (accepting the tradition of the Karens) believe, or came, as Logan suggested, eastward from Bengal, it seems certain that it has been divided into fragments, driven away from the main rivers, and in the main pushed southwards by successive swarms of migration from the north. This pressure from the north seems to have driven some of the Karens down into the Malay Peninsula, where they are still found; and it may well be that, before the rise of the Malays as an aggressive people under Arab leadership, the ancestors of the Kayans occupied parts of the peninsula farther south than the Karens now extend, and possibly also parts of Sumatra. If this was the case, it was inevitable that, with the rise to dominance of the Mohammedan Malays in this region, the Kayans must have been either driven out, exterminated, or converted to Islam and absorbed. It seems probable that different communities of them suffered these three different fates.

The supposition that the Kayans represent a part of such a population, which was driven on by the pressure of Malays to seek a new country in which to practise its extravagant system of PADI culture, is in harmony with the probability as to the date of their immigration to the southern rivers of Borneo; for the rise and expansion of the Menangkabau Malays began in the middle of the twelfth century A.D.; and the Kayans may well have entered Borneo some 700 years ago.

III. We have now to summarise the evidence in favour of the view that the Kayans have imparted to the Kenyahs and many of the Klemantan tribes the principal elements of the peculiar culture which they now have in common.

We have shown that the culture of the Kenyah and Klemantan tribes is in the main very similar to that of the Kayans, and that it differs chiefly in lacking some of its more advanced features, in having less sharply defined outlines, in its greater variability from one community to another, and in the less strict observance of custom. Thus the Kayans in general live in larger communities, each of their villages generally consisting of several long houses; whereas a single long house generally constitutes the whole of a Kenyah or Klemantan village. The Kayans excel in iron-working, in PADI culture, in boat-making, and in house-building. Their customs and beliefs are more elaborated, more definite, more uniform, and more strictly observed. Their social grades are more clearly marked. They hang together more strongly, with a stronger tribal sentiment, and, while the distinction between them and other tribes is everywhere clearly marked and recognised both by themselves and others, the Klemantans and Kenyahs everywhere shade off into one another and into Punans.

The process of conversion of Punans into settled communities that assimilate more or less fully the Kayan culture is still going on. We are acquainted with settled communities which still admit their Punan origin; and these exhibit very various grades of assimilation of the Kayan culture. Some, which in the lives of the older men were still nomadic, still build very poor houses and boats, cultivate PADI very imperfectly, and generally exhibit the Kayan culture in a very imperfect state.

On the other hand, the Kenyahs have assimilated the Kayan culture more perfectly than any other of the aborigines, and in some respects, such as the building of houses, they perhaps equal the Kayans; but even they have not learnt to cultivate PADI in so thorough a manner as to keep themselves supplied with rice all through the year, as the Kayans do; and, like the various Klemantan tribes,[204] they suffer almost every year periods of scarcity during which they rely chiefly on cultivated and wild sago and on tapioca. The Kayans, on the other hand, grow sufficient PADI to last through the year, except in very bad seasons, and they never collect or cultivate sago. The view that this relative imperfection of the agriculture of the Kenyahs and Klemantans is due to

the recency of their adoption of the practice, is confirmed by the fact that many of them still preserve the tradition of the time when they cultivated no PADI. It seems that most of the present Kenyahs first began to plant PADI not more than two, or at most three, centuries ago. Some of the Kenyahs also preserve the tradition of a time when they constructed their houses mainly of bamboo; this was probably their practice for some few generations after they began to acquire the Kayan culture. At the present day those Punans who have only recently taken to the settled mode of life generally make large use of the bamboo in building their small and relatively fragile houses.

The view that the Kayans have played this large civilising role is supported by the fact that Kayan is the language most widely understood in the interior, and that it is largely used for intercommunication, even between members of widely separated Kenyah communities whose dialects have diverged so widely that their own language no longer forms a medium of communication between them; whereas the Kayans themselves do not trouble to acquire familiarity with the Kenyah or Klemantan languages.

If both Kenyahs and Klemantans represent sections of the aboriginal population of nomadic hunters who have absorbed Kayan culture, it remains to account for the existence of those peculiarities of the Kenyahs that have led us to separate them from the tribes which we have classed together as Klemantans. The peculiarities that distinguish Kenyahs from Klemantans are chiefly personal characteristics, notably the bodily build (relatively short limbs and massive trunks), the more lively and energetic temperament, the more generous and expansive and pugnacious disposition. These peculiarities may, we think, be accounted for by the supposition that the aborigines from whom the Kenyahs descend had long occupied the central highlands where most of the Kenyah communities still dwell and which they all regard as the homeland and headquarters of their race.

Of the Klemantan tribes some, E.G. the Aki, the Long Patas, and the Long Akars, resemble more nearly the Kayans; others, E.G. the Muriks, the Sebops, the Lirongs, the Uma Longs, the Pengs or Pinihings, show more affinity with the Kenyahs. It seems probable that these diversities have resulted from the assimilation of culture directly from the Kayans by the one group and from the Kenyahs by the other. A third group of Klemantan tribes such as the Long Kiputs, the Batu Blah, and the Trings, scattered through the northern part of the island, resemble more nearly the Muruts; and among these are found communities whose culture marks them as descendants of nomads who have assimilated the Murut culture in various degrees.

#### The Muruts

The Muruts differ somewhat as regards physical features from all the other tribes, especially in having coarser but less Mongoloid features, a longer skull, and a more lanky build of body and limbs. Their intonation is nasal, and the colour of the skin slightly darker and ruddier than that of the Klemantans.

Their culture differs so much as to lead us to suppose that it had a somewhat different origin from that of the Kayans. They build long houses; but these are comparatively flimsy structures, and they are often situated at a distance from any navigable stream. Even those Muruts who live on the river-banks make much less use of boats than the other tribes, and all of them are great walkers. They have very little skill in boat-making. Their most distinctive peculiarity is their system of agriculture (see vol. i. p. 97), which involves irrigation, the use of buffalo, the raising of two crops a year, and the repeated use in successive years of the same land. Other distinctive features are their peculiar long sword and short spear; the absence of any axe and blow-pipe; the custom according to which the women propose marriage to the men (Kalabits).

In the Philippine Islands a system of agriculture similar to that of the Muruts is widely practised; and some of the tribes, though their culture has been largely influenced by Spanish civilisation, seem to be of the same stock as the Muruts; thus the Tagals of Borneo are not improbably a section of the people known as Tagalas in the Philippines, and the Bisayas of Borneo probably bear the same relation to the Visayas of the Philippines.

It seems probable, therefore, that this type of culture has been carried into the north of Borneo by immigrants from the Philippines, whither it was introduced at a remote period, possibly from Annam, the nearest part of the mainland; or possibly it came to Borneo directly from Annam.[205] It is probable that many of the tribes which we have classed with the Muruts, on account of their possession of the Murut culture, are, like the Klemantans and Kenyahs, descendants of the ancient Indonesian population who have adopted the culture of more advanced immigrants. The descendants of the immigrants who introduced this type of culture are, we think, the Muruts proper, who claim that name and dwell chiefly in the Trusan, the Padas, the Sembakong, the Kerayan rivers, and in the head of the Kinabatangan; also the Kalabits in the northern part of the upper basin of the Baram. It is these which display most decidedly the physical peculiarities noted above.

As examples of Klemantan tribes that have partially adopted the Murut culture we would mention the LONG KIPUTS, the BATU BLAHS, the TRINGS, and the ADANGS in the head of the Limbang River; to the same group belong the KADAYANS in the neighbourhood of Bruni, who, from contact with their Malay neighbours, have become in large part Mohammedans of Malay culture.

The Ibans (Sea Dayaks)

The Ibans stand distinctly apart from all the other tribes, both by reason of their physical and mental peculiarities and of the many differences of their culture; we have little doubt that they are the descendants of immigrants who came into the south-western corner of Borneo at no distant date. We regard them as Proto-Malays, that is to say, as of the stock from which the true Malays of Sumatra and the Peninsula were differentiated by the influence of Arab culture. A large number of the ancestors of the present Ibans were probably brought to Borneo from Sumatra less than two hundred years ago. Some two centuries ago, a number of Malay nobles were authorised by the Sultan of Bruni to govern the five rivers of Sarawak proper, namely, the Samarahan, the Sadong, the Batang Lupar, the Saribas, and the Klaka rivers. These Malays were pirate leaders, and they were glad to enrol large numbers of pagan fighting men among their followers; for the latter were glad to do most of the hard work, claiming the heads of the pirates' victims as their principal remuneration, while the Malays retained that part of the booty which had a marketable value. These Malay leaders found, no doubt, that their pagan relatives of Sumatra lent themselves more readily to this service than the less warlike Klemantans of Borneo, and therefore, as we suppose, they brought over considerable numbers of them and settled them about the mouths of these rivers. The co-operation between the piratical Malay Tuankus and the descendants of their imported PROTEGES continued up to the time of the suppression of piracy by the British and Dutch half a century ago. It was from this association with the sea and with coast-pirates that the Ibans became known as the Sea Dayaks by Sir James Brooke; and to this encouragement of their head-hunting proclivity by the Malays is no doubt due their peculiarly ruthless and bloodthirsty devotion to it as to a pastime, rather than (as with the Kayans and other tribes) as to a ceremonial duty occasionally imposed upon them by the death of a chief.

It seems to us probable that the greater part of the ancestors of the Ibans entered Borneo in this way. But there is reason to think that some of them had settled at an earlier date in this part of Borneo and rather farther southward on the Kapuas River. The BUGAUS, KANTUS, and DAUS, who dwell along the southern border of Sarawak, and some other Iban tribes in the northern basin of the Kapuas River, are probably descendants of these earlier immigrants of Proto-Malay stock. In most respects they closely resemble the other Iban tribes, but they are distinguished by some peculiarities of language and accent; their manners are gentler, their bearing less swaggering; they are less given to wandering, and they have little skill in the making and handling of boats. These are recognised by themselves and by other Ibans as belonging to the same people; but they are a little looked down upon by Ibans of the other tribes as any home-staying rural population is looked down upon by travelled cosmopolitans.

This conjectural history of the immigration of the Ibans explains the peculiar fact that, although all the Ibans of all parts are easily distinguishable from all the other peoples, and although they all recognise one another as belonging to the same people, they have no common name for the whole group. They commonly speak of KAMI MENOA (I.E. "we of this country") when they refer to their people as a whole; and the Kayan designation of them as IVAN (immigrant or wanderer) has been adopted by large numbers of them in recent years and modified into Iban, so that the expression KAMI IBAN is now frequently used by them.

The identification of the Iban with a Proto-Malay stock is justified by their language and physical characteristics. The former seems to be the language from which Malay has been formed under Arab influence and culture. It employs many words which are no longer current in Malay, but which, as is shown by Marsden's MALAY DICTIONARY, were in use among Sumatran Malays in the eighteenth century.

Since the Mohammedan populations which now are called Malay are of mixed origin, they present no very well-defined or uniform physical type. But of all Malays those of Sumatra and of the Peninsula are generally recognised as presenting the type in its greatest purity; and it is this type which the Ibans most closely reproduce. The near resemblance of facial type between the Malays and the Ibans is apt to be obscured for the casual visitor by the fact that the Iban puts little or no restraint upon his expressions and is constantly chattering, laughing, and smiling; whereas the Malay is taught from childhood to restrain his expressions and to preserve a severe and grave demeanour in the presence of strangers. But in private the Malay relaxes, and then the resemblance appears

more clearly.

The principal features of the Iban's culture which distinguish it from that of the other tribes may be enumerated here. The Iban closely resembles the Kayan in his method of cultivating PADI, but he is even more careful and skilful, and generally secures a surplus. His house differs characteristically from those of the Kayan type, and resembles the long houses still inhabited by some Sumatran Malays, in being comparatively small, and in having a framework of many light poles rather than of heavy hardwood timbers, and a floor of split bamboo in place of huge planks. In methods of weaving and dyeing cloth and in the character of the cloths produced;[206] in the wearing of ornamental head-cloths; in the weaving of mats and baskets with the PANDANUS leaf and a large rush known as BUMBAN rather than with strips of split rattan; in their methods of trapping and netting fish; in the character of the sword and axe and shield as formerly used;[207] in the use of the fire-piston;[208] in musical instruments and methods; in the custom of earth burial; in the visiting and making of offerings at the graves of noted men in the hope of supernatural aid, -- in all these respects the Iban culture differs from that of the Kayans, and closely resembles that of the Malays.

The Iban culture presents also certain features not common to other peoples of Borneo and not found among the Malays; and all or most are such as must have been exterminated among the Malays on their conversion to Islam, if they had formed part of their culture in their pre-Islamic period. Such are the religious beliefs and customs of the Ibans with the cult of the PETARA; the NGARONG; the rite with the clay crocodile for getting rid of farm pests (vol. ii. p. 88); the use in weaving of a number of designs of animal origin; the adornment of the edge of the ear with many brass rings; the lack of any strict avoidance of killing dogs.

Thirdly, of the features of Iban culture which are common to them and to the other tribes of Borneo, many seem to have been borrowed by them from their neighbours, and often in an incomplete or imperfect manner; such are the system of omenreading, the ritual slaughter of fowls and pigs, much of their dancing and tatuing, the PARANG ILANG and wooden shield, the feathered war-coat of skin, the KELURI or small bag-pipe, and the fashion of wearing their hair, -- all these seem to have been borrowed from the Kayans; the woman's corset of brassbound hoops, from the Malohs; the mat worn posteriorly for sitting upon, from the Kenyahs.[209]

Besides the three great invasions of foreign blood and foreign culture, those borne by the Kayans, the Muruts, and the Ibans respectively, there have been numerous minor invasions on all sides. In the following paragraphs we make mention of those that seem to have been of most importance in modifying the population and the culture of Borneo.

In the south there are traces of Javanese culture with its Hindu elements among many of the tribes, but especially among the Land Dayaks who occupy the southern extremity of Sarawak. These cremate their dead; they set apart a separate round house for the trophies of human heads, and in this the bachelors are expected to pass the nights. The Malawis of South-East Borneo seem to be similar in many respects to the Land Dayaks of Sarawak. The Land Dayaks have a reputation in Upper Sarawak for quicker intelligence and more adaptability than the other tribes, and hence are in much request for services of the most various kinds. It is an interesting question whether this may be due to a dash of Hindu blood; the facial type and the more abundant growth of hair on the face would support an affirmative answer.

The Malohs are a well-marked tribe found on the Kalis and Mandai rivers, tributaries of the Kapuas River. Physically they are marked by exceptionally long narrow heads (index about 76). They speak a language very different from those of the central and northern parts of the island, but speak also the Iban language with a peculiar accent. The Malohs alone of all the peoples of Borneo eat the flesh of the crocodile. The most distinctive feature of their culture is their skill and industry in brass working. Malohs supply a large proportion of all the brass-ware to be found in the interior. This addiction to brass-working suggests that they represent an immigration from Java, which has long enjoyed a great reputation for its brass-ware and an extensive market throughout the islands.

On the east coast are many communities of Bugis, who are mostly Mohammedans and seem to have come from Celebes, where they are a numerous people.

In the north and extreme north-west the Dusuns seem to be of Murut stock with an infusion of Chinese blood and culture. They use a plough drawn by buffalo in the PADI fields, which they irrigate systematically.

Round about the northern coasts are to be found many small bands of Lanuns and Bajaus, living largely in boats. They are mostly Mohammedans, and descend from the notorious piratical communities whose headquarters

were in the Sulu Islands and other islands off the north–east coast.

In the foregoing pages we have said very little about the languages spoken by the tribes of Borneo. Although one of us has a practical command of the Kayan, Kenyah, Sea Dayak, and Malay languages, and a tolerably intimate acquaintance with a number of the Klemantan dialects, we do not venture upon the task of discussing their systematic positions and relations to languages of other areas. For this would be a task of extreme difficulty and complexity which only an accomplished linguistic scholar could profitably undertake. Nevertheless, we think it worth while to add a few words regarding the bearing of the languages on the foregoing ethnological discussion. It seems clear that in the main the differences and affinities between the many languages and dialects spoken by the pagan tribes bear out, so far as they are known to us, the principal conclusions of our argument. The Sea Dayak or Iban tongue stands distinctly apart from all the rest, and is indisputably very closely allied to the Malay. The Kenyahs, Klemantans, and Punans speak a great variety of tongues, which are, however, so closely similar, and the extreme members of which are connected by so many intermediate forms, that it would seem they may properly be regarded as but dialects of one language. The Kayan language, on the other hand, stands apart from both the Iban and the Klemantan languages, but is much nearer to the latter than the former. The Kenyah dialects especially contain many words or roots that appear also in the Kayan, and seem to be more closely allied to it than is any of the Klemantan tongues. This may well be due to the more intimate contact with the Kayans enjoyed by the Kenyahs, who, as we have seen, have assimilated the Kayan culture more completely than any other of the indigenous tribes, and who may well have taken up many Kayan words together with other culture elements.

The Murut languages again seem to stand apart from the Iban, Kayan, and Kenyah–Klemantan, as a distinct group whose vocabulary has little in common with those others.[210]

In conclusion, we venture to make a suggestion which we admit to be widely speculative and by which we wish only to draw attention to a remote possibility which, if further evidence in its favour should be discovered, would be one of great interest. We have throughout maintained the view, now adopted by many others, of which Professor Keane has been the principal exponent, namely, the view that the Indonesian stock was largely, probably predominantly, of Caucasian origin. In our chapter on animistic beliefs concerning animals and plants, and in the chapter on religion, we have shown that the Kayans believe in a multiplicity of anthropomorphic deities which, with Lake Tenangan at the head of a galaxy of subordinate gods and goddesses presiding over special departments of nature, strangely resembles the group of divine beings who, in the imagination of the fathers of European culture, dwelt in Olympus. And we have shown that the system of divination practised by the Kayans (the taking of omens from the flight and cries of birds, and the system of augury by the entrails of sacrificial victims) strangely resembles, even in many details, the corresponding system practised by the early Romans. Our suggestion is, then, that these two systems may have had a common root; that, while the Aryans carried the system westward into Europe, the Indonesians, or some Caucasian people which has been merged in the Indonesian stock, carried it eastward; and that the Kayans, with their strongly conservative tendencies, their serious religious temperament, and strong tribal organisation, have, of all the Indonesians, preserved most faithfully this ancient religious system and have imparted it in a more or less partial manner to the tribes to whom they have given so much else of culture, custom, and belief.

It is perhaps not without significance in this connection that the Karens, whom we regard as the nearest relatives of the Kayans, were found to worship a Supreme Being, and have proved peculiarly apt pupils of the Christian missionaries who have long laboured among them.

By way of crowning the indiscretion of the foregoing paragraphs, we point out that there are certain faint indications of linguistic support for this speculative suggestion. BALI, which, as we have explained, is used by Kayans and Kenyahs to denote whatever is sacred or is connected with religious practices, is undoubtedly a word of Sanskrit derivation.[211] FLAKI, the name of the bird of most importance in augury, bears a suggestive resemblance to the German FALKE and the Latin FALCO. The Kayan word for omen is AMAN, the resemblance of which to the Latin word is striking. Are these resemblances merely accidental? If more of the words connected with the religious beliefs and practices could be shown to exhibit equally close resemblances, we should be justified in saying -- No.

## CHAPTER 22. Government

In an earlier chapter we have sketched the history of government in Borneo from the earliest times of which any record remains, up to the time at which the whole island was brought under European control. In this chapter we propose to describe the way in which the European governments have extended their spheres of influence and have secured the co-operation of the natives in the maintenance of peace and order and freedom.

For some years after Mr. James Brooke became Rajah of Sarawak (1841), his rule was confined to the territory then known as Sarawak. This area, still known as Sarawak proper, is some 7000 square miles in extent and comprises the basins of the following rivers: the Sarawak, the Samarahan, the Sadong, and the Lundu. The Batang Lupar and Saribas rivers, which enter the sea to the north of this area, were infested by pirate bands under the leadership of Malay Serifs who, though they professed allegiance to the Sultan of Bruni, were but little controlled by him. The depredations of these unruly neighbours led Sir James Brooke to undertake several expeditions against them. In the year 1849, Captain Sir Harry Keppel of H.M.S. DIDO lent his aid (not for the first time), and the combined forces finally swept out those hornets' nests and put an end to piracy in those regions. With the approval of the Sultan of Bruni, Rajah Brooke established stations in the lower waters of the Saribas and Skarang rivers, and a little later at Kanowit on the Rejang River. This was the first of a series of similar steps by which the area of the Raj has been successively extended, until now it comprises about 60,000 square miles, more than eight times its original extent. In each of these out-stations one or two English officers were appointed to represent the Rajah's government. In each station a small wooden fort was built, and in some cases the fort was surrounded with a stockade. This served as residence for the officer, or officers, and their small band of native police, generally some ten or twelve Malays armed with rifles and a small cannon. The prime duty of these officers, entitled Governors (or later, Residents), was to protect the local population from the oppression and depredations of the Serifs, and generally to discourage and punish bloodshed and disorder. The general policy followed in all these new districts was to elicit the co-operation of the local chiefs and headmen, and, when the people had begun to appreciate the benefits of peace, including the opening of the rivers to Malay and Chinese traders, to impose a small poll-tax to defray the expenses of administration. The area of control was then gradually extended farther into the interior by securing the voluntary adhesion of communities and tribes settled in the tributaries and higher waters of each river. This policy, steadily pursued in one district after another, has invariably succeeded, although the time required for complete pacification has, of course, varied considerably; and it was only during the early years of this century that the process seemed to reach its final stage among the Sea Dayaks in the interiors of the Batang Lupar and Rejang districts.

The stability of the Rajah's government was seriously threatened in 1857 by the insurrection of Chinese gold-workers at Bau in Sarawak proper. But this rebellion, in the course of which Sir James Brooke narrowly escaped death at the hands of the rebels, was soon suppressed, largely by the energy of the Tuan Muda (the present Rajah), who came to the aid of Sir James with a strong force of Sea Dayaks and Malays.

The process of establishing order and good government in the new territory was complicated by the intrigues of the Bruni nobles or PANGIRANS and of the independent Malay chiefs, who, seeing their power to oppress and misrule the coast districts seriously curtailed, and indeed threatened with extinction, by the growing influence of the Europeans in Borneo, conspired with others of similar status in Dutch Borneo to rid the island of these unwelcome innovators. In the year 1859 two English officers of the Sarawak government at Kanowit on the lower Rejang (Messrs. Fox and Steele) were murdered by a gang of Malanaus. There was good reason to believe that this incident, together with several murders of Europeans in Dutch Borneo, was the result of a loosely concerted action of the Malay chiefs, and that the Kanowit murders were directly instigated by Serif Masahor and Pangiran Dipa; the latter a Bruni noble who misruled Muka and the surrounding area. Rajah Brooke visited the Sultan of Bruni and secured his authorisation for the punishment of these and others concerned in the murders; and in 1860 an expedition, led by his two nephews, captured Muka and would have expelled the Serif and the Pangiran but for the untimely interference of the British Consul at Bruni, who seems to have been misinformed of the nature of the

situation.[212] In the following year the Rajah, visiting the Sultan at Bruni, found him willing to cede Muka and the basins of the adjoining rivers, the Oya, Tatau, and Bintulu, in return for a perpetual annual payment of 16,000 dollars, an arrangement which was accepted and which still holds good. Thus the intrigues of the Malay nobles, which for a time had seriously threatened the stability of the Rajah's government, resulted in the addition of an area of some 7000 square miles to the Sarawak territory.

The basin of the Rejang, the largest river of Sarawak, was the next region to be added to the Raj. Here Sir James Brooke's government first came into contact with the Kayans (in the year 1863). The reputation of the Kayans as a dominant tribe of warriors, whose raids were feared even as far as Bruni, had rendered them proud and self-confident—and unready to appreciate the benefits of the Rajah's government. Their continued hostility rendered advisable a demonstration of force. Accordingly in the year 1863 the Tuan Muda (the present Rajah, H. H. Sir Charles Brooke) led an expedition of some 10,000 or more native levies, consisting chiefly of Sea Dayaks and Malays, up the Rejang as far as the mouth of the Baloi Peh, a spot some 250 miles from the mouth of the Rejang and in the edge of the Kayan country. The Kayans could not withstand so large a force and retreated farther up river after but little show of resistance. Several of their long houses were destroyed, and a message demanding their submission to the Rajah's government was sent by a captive to Oyong Hang, the most influential of the Kayan chiefs. The messenger carried a cannon-ball and the Sarawak flag, and was instructed to ask Oyong Hang which he would choose; to which question the chief is said to have returned the answer that he wanted neither. Although the expedition failed to secure the submission of any large number of the Kayans and Kenyahs, it established the Rajah's authority as far as it had penetrated; for a number of Klemantan villages settled in the middle reaches of the Rejang accepted the offer of peace, and a number of their chiefs brought the Sarawak flag down river and celebrated the traditional peace-making rites with the Rajah's representative. The Kayans have never since attempted to raid the lower reaches of the river; but it was not until the early eighties, during the Residency of the late Mr. H. B. Low, that the bulk of the Kayans of the Rejang acknowledged the Rajah's authority and began to co-operate in his administration, a result achieved without any repetition of the large expedition of 1863. From that time (about 1885) the Baloi or Upper Rejang may be regarded as having formed part of Sarawak.

In the year 1882 the northern boundary of Sarawak was again pushed forward by the cession to the Rajah by the Sultan of Bruni of the basin of the Baram, an area of some 10,000 square miles, on condition of a perpetual annual payment of 6000 dollars. This was an area in which, except along the coast, the Sultan's authority had never been exercised, and which had been kept closed to trade and the depredations of the Malays, by the fear of the Kayans. For the Kayans, who dominated all the middle waters of the Baram, had in the past threatened even Bruni. The Sultan was no doubt glad to see the Rajah undertake the task of controlling his formidable neighbours, who, dwelling within striking distance of his capital, were a perpetual menace to his power and even to his personal safety. The Baram district has been brought completely under the Rajah's rule without the introduction of any armed force from outside; and as the process of establishing peace and order has there followed a normal and undisturbed course, and is familiarly known to us, we propose to describe it in some detail on a later page. Since the date of the inclusion of the Baram, the Raj of Sarawak has been again extended towards the north on three occasions. The first of these additions was the basin of the Trusan River. In this case the Sultan offered to sell the territory for a lump sum, and his offer was accepted by the Rajah, whose officers occupied it in the year 1885. In 1890, the people living on the Limbang River, whose basin adjoins that of the Baram on its northern border, were in a state of rebellion against the Sultan, and the region had for several years been in a very disturbed state. The present Rajah therefore proposed to annex the country in return for an annual payment. The British Government was asked to approve this step and to fix the amount of the sum to be paid to the Sultan. A favourable reply having been given by the Foreign Office, and the annual sum of 6000 dollars having been awarded as a fair return for the cession, the administration of the country was peacefully entered upon by the Rajah's officers, who were warmly welcomed by the greater part of the inhabitants.

The latest and presumably the final extension of the boundaries of Sarawak was effected in 1905, when the basin of the small river Lawas was bought from the British North Borneo Company.

In the opening year of this century a small part of Borneo still remained under purely native control, namely, the town of Bruni and an area about it of 1700 square miles, comprising the basins of the small rivers Balait and Tutong. By agreement with the Sultan this area was placed under the administration of a Resident representing the



British Government in the year 1906. Thus the European occupation of Borneo was completed.

The history of the establishment of Dutch rule throughout the larger part of Borneo has been similar to that of the acquisition of Sarawak by its two English Rajahs. Dutch trading stations were established in the south-west corner of Borneo as early as 1604. In the seventeenth century stations were established in southern Borneo by both British and Dutch traders; but the Dutch traders extended their influence more rapidly than their rivals, and by the middle of the eighteenth century had secured a practically exclusive influence in those parts. The British held possession of all the Dutch East Indies during the brief period (1811 — 1816) which was terminated by the Congress of Vienna. On the retirement of the British, the Dutch Government took over all the rights acquired by the Dutch traders; and since that time it has continued to consolidate its control and to extend the area of its administration farther into the interior along the courses of the great rivers. There were in the area that is now Dutch Borneo several independent Malay Sultans, of which the principal had their capitals at Pontianak, Banjarmasin, and Kotei. In 1823 the Sultan of Banjarmasin ceded a large part of his territory to the Dutch government; in 1844 the Sultan of Kotei accepted its protection; and by similar steps by far the larger part of the island has been marked out as the Dutch sphere of influence. The water parting from which the principal rivers flow east and west has been agreed upon by the Dutch and the Sarawak governments as the boundary between their territories; and though the upper waters of the great rivers which flow west and south through Dutch Borneo have up to the present time hardly been explored, the authority of the Dutch Government is well established over all the tribes of the coastal regions and, especially in the south, extends far into the interior, but is still little more than nominal in the head waters of the rivers. The system of administration now practised by the Dutch closely resembles in most essential respects that obtaining in Sarawak, and it has brought to the natives of the greater part of Dutch Borneo the same great benefits, peace, freedom, justice, and trade.

The northern extremity of Borneo, an area comprising some 31,000 square miles and 200,000 inhabitants, is now administered by the British North Borneo Company (chartered by the British Government in 1892), which acquired it by purchase in successive instalments from the Sultans of Bruni and Sulu. The Company has followed in the main an administrative policy similar to that of Sarawak, and has appointed as governors officers of large East Indian experience placed at their disposal by the British Government. The Company has attempted to achieve in a brief period a degree of commercial development which in Sarawak and Dutch Borneo has been reached only gradually in the course of several generations; and to this circumstance must be attributed many of the difficulties which for a time caused it "to get into the newspapers." But these difficulties have now been overcome, and the whole territory placed in a condition of prosperity and orderly progress.

It has been widely recognised that Sarawak provides a most notable example of beneficent administration of the affairs of a population in a lowly state of culture by representatives of our Western civilisation. Among all such administrative systems that of Sarawak has been distinguished not only by the rapid establishment of peace, order, and a modest prosperity, with a minimum output of armed force, but especially by reason of the careful way in which the interests of the native population have constantly been made the prime object of the government's solicitude. The story of the success of the two white Rajahs of Sarawak has several times been told in whole or in part. But we think it is worth while to try to give some intimate glimpses of the working of the system as it affects the daily lives of the pagan tribes, taking our illustrations in the main from incidents in which one of us has been personally concerned.

From the very inception of his rule, Sir James Brooke laid down and strictly adhered to the principle of associating the natives with himself and his European assistants in the government of the country, and of respecting and maintaining whatever was not positively objectionable in the laws and customs of the people. And this policy has been as faithfully followed by the present Rajah.[213] The Raj of which Sir James Brooke became the absolute ruler in the way described in Chapter II. was a country in which the supreme authority had been exercised for many generations by Malay rulers, and in which the only generally recognised system of law was the Mohammedan law administered by them. The two white Rajahs, instead of imposing any system of European-made laws upon the people, as in their Position of benevolent despot they might have been tempted to do, have accepted the Mohammedan law and custom in all matters affecting the population of the Mohammedan religion; and they have gradually introduced improvements when and where the defects and injustices of the system revealed themselves. In the work both of administration and legislation the Rajahs have always sought and enjoyed the advice and co-operation of Malays. They have maintained the principal ministries of State, and have

continued the tenure of those offices by the Malay nobles who occupied them at the time of Sir James Brooke's accession to power; and, as these have died or retired in the natural course, they have chosen leading Malays of the aristocratic class to fill the vacancies. Three of these Malay officers, namely, the Datu Bandar, Datu Imaum, and the Datu Hakim, have been members of the Supreme Council since its institution in 1855. The first of these offices may be best defined by likening it to that of a Lord Mayor; or better, perhaps, to that of the salaried Burgomaster of a German city; its occupant is understood to be the leading citizen of the Malay community of Kuching, the capital town of Sarawak. The Datu Imaum is the religious head of the Mohammedan community, and the Datu Hakim the principal of the Malay judges.

The Supreme Council consists of the three Malay officers named above together with three or four of the principal European officers, and the Rajah, who presides over its deliberations. It meets at least once a month to consider all matters referred to it by lower tribunals. It embodies the absolute authority of the Rajah; from its decrees there is no appeal. It decides questions of justice, administration, and legislation; and it continually enriches and improves the law by creating precedents, which serve to guide the local courts, by deliberately revising and repealing laws, and by adding new laws to the Statute Book. It is the sole legislative authority. The presence of the Malay members at the meetings of the Council is by no means a mere formality; they take an active part in its deliberations and decisions.

Beside the Supreme Council there exists a larger body whose functions are purely advisory. It is called the Council NEGRI or State Council, and consists of the Rajah and the members of the Supreme Council, the Residents in charge of the more important districts, and the principal "Native Officers" and PENGHULUS, some seventy members in all. This Council meets at Kuching once in every three years under the presidency of the Rajah, who provides the members with suitable lodgings and entertains them at dinner. At the meeting of this council topics of general interest are discussed, and the Rajah makes some general review of the state of public affairs and the progress achieved since the previous meeting. But the principal purpose of the institution is the bringing together, under conditions favourable for friendly intercourse, of the leading men of the whole country. Each new member is formally sworn in, taking an oath of loyalty to the Rajah and his government. The native chiefs return from these meetings with an enhanced sense of the importance and dignity of their office and with clearer notions of the whole system of government and of their places in it.

Though Mohammedan law remains as the basis of the law administered among the Malays, notable improvements have been introduced, E.G. the death penalty for incest and corporal punishment for conjugal infidelity have been abolished; slaveholding, though not made illegal, has been discouraged throughout the country by rendering it easy for slaves to secure their freedom; and the power of the master over his slave has been greatly restricted. A man is not allowed to marry a second or third wife, unless he can prove himself able to provide for each of the women and her offspring; wilful murder is always punished by death or long imprisonment, not merely by imposition of a fine as in former times.

The development of commerce and industries has, of course, given rise to legal questions for which the Mohammedan law provides no answers; and to meet these necessities, laws modelled on the Indian code and on English law have been enacted.

The presence of a large Chinese community (now comprising some 50,000 persons) has always been a source of legal and administrative difficulties. These difficulties have been met in the past by securing the presence of leading Chinese merchants on the judicial bench, as assessors familiar with the language, customs, and circumstances of their countrymen, whenever the latter have been involved in legal proceedings. In the present year a special court for the trial of Chinese civil cases has been instituted, consisting of seven of the leading Chinese merchants, of whom all, save the president, who is nominated by the Rajah, are elected by the Chinese community.

The government of the pagan population, comprising as it does so many tribes of diverse customs, languages, and circumstances, has presented a more varied and in many respects a more difficult problem. But the same principles have been everywhere applied in their case also. The backbone of the administrative and judicial system has been constituted by the small staff of English officers carefully chosen by the Rajah, and increased from time to time as the extension of the boundaries of Sarawak opened new fields for their activities. During recent years this administrative staff has counted some fifty to sixty English members. Of these about a dozen are quartered in Kuching, namely, the Resident of the first division, his assistant, a second-class Resident, and the

heads of the principal departments, the post office, police and prisons, the treasury, the department of lands and surveys, public works, education, and the rangers.

The Sarawak rangers are a body of some 400 men trained to the use of fire-arms and under military discipline. The majority are Sea Dayaks, the remainder Malays and Sikhs. Two white officers, the commandant and the gunnery instructor, are supported by native non-commissioned officers. The force is recruited by voluntary enlistment, the men joining in the first place for five years' service. This force supplies the garrisons of the small forts, one or more of which are maintained in each district; and from it a small body of riflemen has commonly been drawn to form the nucleus of any expeditionary force required for punitive operations.

The whole territory of Sarawak is divided into four divisions, each of which is again divided into two or more districts. The first division coincides with Sarawak proper; the second includes the Batang Lupar, Saribas, and Kelaka districts; the third comprises the Rejang, Oya, Muka, Bintulu, and Matu districts; the fourth consists of the Baram, Limbang, Trusan, and Lawas. The first, third, and fourth divisions are administered by divisional Residents, which three officers rank next to the Rajah in the official hierarchy. Each district is under the immediate charge of an officer. These district officers are of two ranks, namely Residents of the second class, and Assistant Residents. In each district, with the exception of the smallest, the Resident is assisted in his multifarious duties by a second white officer of the rank of cadet or extra-officer, and has under his direction a squad of ten to twenty-five rangers under the charge of a sergeant; a sergeant of police in charge of about twelve policemen, who are generally drawn from the locality; several Malay or Chinese clerks; and generally some two or three "native officers." The last are Malays of the aristocratic class resident in the district; they are appointed by the Rajah on the recommendation of the Resident and receive a regular salary. Their duties are to assist the Resident in his police-court work, to hold special courts for the settlement of purely Malay cases of a domestic nature, and to take charge of the station in the absence of the Resident and his assistant.

The prime duty of the Resident is to preserve order in his district and to punish crimes of violence. But he is responsible also for every detail of administration, including the collection of taxes and customs duties, the settlement of disputes, and the hearing of complaints of all kinds, the furnishing of reports to the central government on all matters of moment, the development of trade and the protection of traders, especially the inoffensive Chinese; and above all, in the newer districts, it is his duty to gain the confidence of the chiefs of the wilder tribes, and to lead them to accept the Sarawak flag and the benefits of the Rajah's government, in return for the small poll-tax required of them. It is well recognised by the Rajah and his officers that the success of a Resident depends primarily upon his acquiring intimate knowledge of the people and establishing and maintaining good relations with them; and with this end in view every Resident is expected to be familiar not only with the Malay language, which is the official language of the country, as well as in some measure a common medium of communication between the chiefs of the various tribes, but also with one or more of the other languages spoken in his district. The headquarters of the Resident are usually the fort, or a small residency built not far from it in the lower reaches of the chief river of his district. Here a Chinese bazaar, I.E. a compact village of Chinese traders and shopkeepers, and a Malay Kampong, generally spring up under the shelter of the fort; and thus the station becomes the headquarters of trade as well as of administration. To this centre the workers of jungle produce bring their stuff, floating down river on rafts of rattans or in their canoes; from it the Malay and Chinese traders or pedlars set out in their boats for long journeys among the up-river people; and to it come occasional parties of the up-river tribesmen, to consult with the Resident, to seek redress for wrongs, to report the movements of tribes in the adjacent territories, or to obtain permission to go on the war-path in order to punish offences committed against them.

Since the river is the one great high road, and since the Resident and his assistants are seated generally near the point where it leaves the district, the coming and going of all visitors can hardly escape their observation. And, since the station sees every few days the arrival of visitors or the return of parties of its own people from up river, the Resident can keep himself pretty well informed of the state of the country, and all news of importance will reach him after no long delay, if only he is always accessible and willing to turn a sympathetic ear to all comers.

But the successful administration of one of the larger and wilder districts, such as the Rejang or the Baram, requires that the Resident shall not be content with the zealous discharge of his many duties at his headquarters. He can only establish intimate relations of reciprocal knowledge and confidence with the chiefs of the many

scattered communities of his district by making long journeys up river several times a year. And situations not infrequently arise which urgently demand his presence in some outlying part of his district and which serve as the occasions of such journeys.

Before describing such a journey, something must be said of the place in the scheme of government occupied by the chiefs and headmen of the various communities. Each of the Malay Kampongs and other similar villages of the Malanaus and other coastwise peoples is under the immediate charge of one of its more influential elders, who bears the title of TUAH KAMPONG. He is appointed by the Rajah on the recommendation of the Resident and receives a small salary. His duties are to settle the minor disputes of his village, to collect the tax, to keep order, and to report all breaches of the peace to the Resident. He has authority to call in the police and to order the arrest of any villager; in cases of dispute between villages he represents his village in the Resident's court, and, where his own people are concerned, he may sit on the bench with the Resident to hear and advise upon the case. The Sarawak flag is the badge of his office, and his position and duties are defined in a document bearing the Rajah's signature.

From among the more influential chiefs of the up-river communities the Rajah appoints, on the recommendation of the Resident, a certain number in each district to the office of PENGHULU. In a district of Mixed population such as the Baram, one PENGHULU (sometimes two) is usually appointed for each of the principal tribes of the district, E.G. in the Baram are, or recently were, two Kayans, one Kenyah, one Sebop, and one Barawan holding the office. The principal PENGHULUS are made members of the Council of State, and they are expected to attend its triennial meetings. The status of the PENGHULUS is similar to that of the TUAH KAMPONG, and he also is given the Sarawak flag, which he will display on his boat on official journeys, and a document signed by the Rajah recording his appointment and the duties of his office; but many of them derive a considerably greater importance than their fellows from the numerical strength and the warlike character of their followings. The PENGHULU has authority not only over his own house or village, but also over the chiefs or headmen of other communities of the same tribe and region. He is expected to keep the Resident informed of any local incident requiring his attention, and to be present in the Resident's court when any of his people are tried for any serious offence; he has authority to try minor cases, both civil and criminal, among his own people. Perhaps his most important service is the following. When an up-river man has been charged with a serious offence, the summons of the Resident's court is forwarded to the PENGHULU of his tribe and district with the instruction that he shall send the man down river to headquarters. It is generally possible for the PENGHULU to call the man to him, and, by explaining to him the situation and the order of the Resident, to secure his peaceful surrender. But in case of refusal to come, or of active resistance, the PENGHULU is expected to apply such force as may be necessary for effecting the arrest and the conveyance to headquarters. In this way in a well-governed district the arrest of evildoers is effected with remarkable sureness and with far less risk of violence, bloodshed, and the arousal of angry passions, than if the Resident should send his police or rangers to do the work. The PENGHULU is in a much better position than the Resident for obtaining accurate information upon, and a full understanding of, the circumstances of any such up-river incidents; and his help is thus often of the greatest value to the Resident. If he judges that the accused man is innocent, and especially if the charge against him has been made by a Chinaman, a Malay, or a member of any other than his own tribe, he will usually accompany the prisoner to headquarters, in order to see that no injustice is done him. Another important function of the PENGHULU is the preliminary investigation of breaches of the peace among his people (see vol. ii. p. 219).

The PENGHULU is responsible also for the collection of the door-tax from the chief of each house or village of his people and for its delivery to the Resident. He is allowed to exercise a certain discretion in the matter of remission of taxes to elderly or infirm householders. He is responsible also for the transmission to the Resident of all sums in payment of fines of more than five dollars, imposed by himself or by his subordinate chiefs. On the happily infrequent occasions on which it becomes necessary to organise a punitive expedition, the PENGHULUS are expected to help in the raising of the required force, and to accompany the expedition as commanders of their own group of warriors, acting under the orders of the Resident.

A PENGHULU is punished for neglect of his duties by suspension from his office for a definite period, or in more serious cases by dismissal and the appointment of another chief. Since the dignity and prestige of the office are high, this punishment is deeply felt.

Among the Kayans and Kenyahs and most of the Klemantans, the PENGHULUS exercise a very effective

authority, and, since with few exceptions the chiefs chosen to fill the office have been loyal, zealous, and capable, they have rendered great services to the government. Among the Sea Dayaks the lack of authority of the chiefs, which is a characteristic feature of their social system, has rendered it impossible to secure for their PENGHULUS the same high standing and large influence; the result of which has been the creation of an unduly large number of these officers and the consequent further depreciation of the dignity of the office.

The PENGHULU is the link between the native system of government as it obtained before the coming of the white man, and that established and maintained by the Rajah and his white officers. The former consisted of the exercise of authority by the several chiefs, each over the people of his own village only, except in so far as a chief might acquire some special prestige and influence over others through his own reputation for wisdom and that of his people for success in war. Among the Kayans and Kenyahs especially, the principal chiefs have long aimed at extending their influence by marrying their relatives to those of other powerful chiefs. In this way chiefs of exceptional capacity, aided by good fortune, have achieved in certain instances a very extended influence. Such a chief was Laki Avit, a Kenyah, who, some twenty years before the Rajah's officers first entered upon the task of administering the Baram, was recognised throughout all the interior of the district as the leading chief, a position which could only have been achieved by the consistent pursuit of a wise policy of conciliation and just dealing between Kenyahs and Kayans. But the order and peace maintained by the influence of such a chief depended wholly on his continued vigour, and they seldom or never survived his death by more than a few years. In the case of Laki Avit, for example, the Bruni Malays, jealous and afraid of the allied Kayans and Kenyahs, soon succeeded by means of murderous intrigues in bringing back the more normal condition of suspicious hostility and frequent warfare. Thus, although several chiefs had endeavoured to establish peace throughout wide areas, no one of them had achieved any enduring success. For this end the unifying influence of a central authority and superior power was necessary, and this was supplied by the Rajah. We may liken the whole system of society as now established to a conical structure consisting of a common apex from which lines of authority descend to the base, branching as they go at three principal levels. If we imagine the upper part of this structure cut away at a horizontal plane just above the lowest level of branching, we have a diagrammatic representation of the state of affairs preceding the Rajah's advent — a large number of small cones each representing a village unified by the subordination of its members to its chief, but each one remaining isolated without any bond of union with its neighbours. At the present time the base of the cone remains almost unchanged, but the Rajah's government binds together all its isolated groups to form one harmonious whole, by means of the hierarchy of officers whose authority proceeds from the Rajah himself, the apex of the system.

The establishment of the Rajah's government has thus involved no breaking up of the old forms of society, no attempt to recast it after any foreign model, but has merely supplied the elements that were lacking to the system, if it was to enable men to live at peace, to prosper and multiply, and to enjoy the fruits of their labours. But though we describe the society of Sarawak as being now a completed structure, the simile is inadequate and might mislead. The structure is not that of a rigid building, but of a living organisation; and its efficiency and permanence depend upon the unceasing activities of all its parts, each conscious of the whole and of its own essential role in the life of the whole, and each animated by a common spirit of unswerving devotion to, and untiring effort in the cause of, the whole. The Rajah's power rests upon the broad base of the people's willing co-operation; he in turn is for them the symbol of the whole, by the aid of which they are enabled to think of the state as their common country and common object of devotion; and from him there descends through his officers the spirit which animates the whole, a spirit of reciprocal confidence, justice, goodwill, and devotion to duty. The system is in fact the realisation of the ideal of monarchy or personal government; its successful working depends above all on the character and intellect of the man who stands at the head of the state; and the steady progress of all better aspects of civilisation in Sarawak, a progress which has evoked the warm praise of many experienced and independent observers,[214] has been due to the fact that the resolution, the tact and sympathy, the wisdom and high ideals which enabled the first of its English Rajahs to establish his authority, have been unfailingly displayed in no less degree by his successor throughout his long reign.

It is obvious that this permeation of the whole system of government by the spirit of its head can only be perpetuated by constant personal intercourse between him and his officers and between the officers of the various grades. This has been a main principle observed by the Rajah. He has frequently visited the district stations, to spend a few days in consultation with his white officers, and to renew his personal acquaintance with the local

chiefs, who spontaneously assemble to await his arrival. Such visits to any station have seldom been made at greater intervals than one year; and these annual meetings at the district stations between the Rajah and his officers of all grades have been of the utmost value in preserving the profound and personal respect with which he is regarded throughout the land and which is in due measure reflected to his representatives, both white and native. The Rajah has also kept himself in close touch with the Residents and the affairs even of the remotest districts by encouraging the Residents to write to him personally and fully on all important matters, and by writing with his own hand full and prompt replies.

The foregoing brief account of the system of government will have accentuated its essentially personal character; and it will have made clear the necessity for constant personal intercourse between the officers of various grades, and for the long excursions of the Residents into the interior parts of their districts, one of which we propose to describe as an illustration of the intimate working of the administrative system. For in the larger and wilder districts the Resident's station may be separated from populous villages by a tract of wild jungle country, the return journey over which cannot be accomplished in less than a month or even more.

The journey we are about to describe, as illustrative of the administrative labours of the Resident of one of the wilder districts, was made in the Baram in the year 1898 by one of us (C. H.) in the course of his official duties and in part only by the joint-author of this book. A slight sketch of the political history and condition of the Baram is required to render intelligible the objects of the journey and the course of events. The Baram was added to Sarawak territory, under the circumstances described above (vol. ii. p. 261), in the year 1882. At that time it enjoyed the reputation of a wild and dangerous region, owing to the strength of the Kayans, who, dwelling in all the middle parts of the rivers, had made a number of bold raids as far as the coast and even to the neighbourhood of Bruni. The Sea Dayaks had obtained no footing in the river, and the Klemantans, who dwelt in the lower reaches, had proved quite incapable of withstanding their formidable neighbours. The latter had driven them out of the more desirable parts of the river, had made many slaves, and had appropriated many of the valuable caves in which they had gathered the edible nests of the swift. But considerable numbers of the Klemantans remained in the lower reaches and in some of the tributary rivers. The upper waters of the Baram were occupied mainly by Kenyah communities; and about the watershed in which the Baram, the Rejang, and the Batang Kayan have their sources (a mountainous highland, geographically the very centre of the island, known as Usun Apo), were the Madangs, a powerful sub-tribe of the Kenyahs, whose reputation as warriors was second to none. In 1883 a fort was built at Marudi (now officially known as Claudetown), a spot on the river-bank some sixty miles from the sea, the first spot at which in ascending the river a high bank suitable for a settlement is encountered. Here Mr. Claude de Crespigny, assisted by two junior officers, a squad of some thirty rangers, and a few native police, began the task of introducing law and order into these 10,000 square miles of dense jungles, rushing rivers, and high mountains, the scene for unknown ages of the hard perpetual struggle of savage man with nature, and of the fierce conflict of man with man. At first the interior tribes remained aloof, and the little outpost of civilisation was frequently threatened by them with extermination. But after some few years the Kayans of the lower villages became reconciled to the new state of affairs, recognised the authority of the Rajah and of the Resident, and consented to pay the small annual door-tax amounting to two dollars per family or door.

These were the Kayans of villages that were readily accessible because seated on reaches of the river navigable by the Resident's steam-launch, that is, not more than seventy miles above Claudetown. It was soon realised that the people of the remoter parts were only to be brought under the Rajah's government by means of friendly visits of the Resident to their villages. This policy was actively pursued by Mr. Charles Hose, who had become assistant to the Resident in 1884, officer in charge in 1888, and Resident in 1890; some four or five long journeys were made each year, each occupying several weeks. During these journeys, which were necessarily made in the native boats, the Resident would spend the nights, whenever possible, in the native houses, sometimes whiling away several days in friendly intercourse with his hosts, and thus acquiring much useful information as well as more intimate understanding of their characters, languages, and customs. In this way the area of government control was extended step by step, until about the year 1891 practically all the inhabitants of the Baram had accepted the Rajah's government and acknowledged it by the payment of some tax, however small. The chiefs of the Klemantans and their people were for the most part very glad to place themselves under the protection of this new government; but the Kayans and Kenyahs, not feeling themselves to be in need of any such protection, were less ready to accept the Resident's proposals. Two considerations mainly induced them to take

this course: first, they desired peace, or at any rate less warfare, and it was possible to convince them that this result might be achieved by pointing to other districts such as the Rejang, with whose affairs they had some acquaintance. Secondly, they found that a Chinese bazaar had sprung up at Claudetown, and that, as soon as they accepted the Rajah's government, they would obtain greatly increased facilities for driving the highly profitable trade in jungle produce; for, before they had come under the government, the Chinese and Malay traders had hardly ventured to penetrate to their remote villages with their cloths and lucifer matches, hardware, steel bars, and other much-coveted goods.

Several of the most influential chiefs who had early showed themselves staunch friends of the government were made PENGHULUS, and have long continued by their example and influence energetically to support the Resident, notably the Kayan, Tama Usong, and the Kenyah, Tama Bulan (see Pls. 49, 27). The latter especially, though not one of the first to come in, exercised his great influence consistently, wisely, and energetically, in support of the Resident and in the establishment of peace and order throughout the district and even beyond its boundaries. But he was only one of several chiefs who have displayed a high degree of enlightenment and moral qualities of a very high order.

The hostility of the Kalabits on the north-eastern border, who persistently raided those villages of their fellow-tribesmen that had come under the government, had necessitated an expedition against them in 1893. And Sea Dayak parties of jungle workers had on more than one occasion stirred up serious trouble. But, in spite of these difficulties, by the year 1898 all the inhabitants of the district were paying the regular door-tax, crimes of violence had been almost abolished, trade was everywhere increasing, and peace was assured, save for the threat to it from one quarter, namely, the Madangs of Usun Apo and the neighbouring powerful settlements of Kenyahs across the water-parting in the head-waters of the Batang Kayan. It had always been a weakness of the Rajah's government that it could assure to the Baram people no protection against attack from those regions, the latter of which, though nominally Dutch territory, was not yet controlled by the Dutch government. In the year 1897 a numerous band of Madangs had migrated into the extreme head of the Baram from the corresponding and closely adjoining part of the Rejang, largely owing to the pressure put upon them by the ever roving and meddlesome Sea Dayaks. Neither these Madangs nor the Kenyahs of the Batang Kayan had entered into friendly relations with the Sarawak government, and they had preserved a hostile attitude towards the Baram tribes. The Resident therefore determined to visit the Madangs, and to invite Kenyah chiefs from the Batang Kayan to meet him on the extreme edge of the Sarawak territory, in order to open friendly intercourse with them, and to persuade them if possible to attend a general peace-meeting at Claudetown, at which the outstanding feuds between them and the Baram folk might be ceremonially washed out in the blood of pigs. For, if this attempt could be carried to a successful issue, it would go far to assure the peace of the whole district, and would add considerably to the volume of trade descending the Baram River: An additional feature of the programme was that the Resident should take with him on his visit a number of the Baram chiefs, and should in the course of the journey make arrangements with the largest possible number of chiefs for their attendance at the proposed peace-making.

Accordingly, on the 9th of October 1898, we started from Claudetown in the Resident's launch with a retinue of half a dozen Sea Dayak rangers and two policemen, and towing some half a dozen boats, including one for our own use up-river. After spending a day in visiting villages in the lower Tinjar, the largest tributary of the Baram, we resumed the journey up-river and reached the village of Long Tamala. There we were joined by the chiefs of the two houses Tama Aping Nipa and Tama Aping Kuleh, and were most hospitably entertained by the former. On the following morning we again steamed up-river, having added to our train these two Kenyah chiefs, each with a boat's crew of fighting men, they having agreed to make the whole journey with us. After stopping at several villages at which the Resident's services were in request for the settlement of disputed questions, in the afternoon we reached Long Tajin, a big Kayan village, and were welcomed by Juman, the chief, and his wife Sulau, a woman of strikingly handsome and refined features and graceful aristocratic manner (Pl. 31). She is the daughter of the late Aban Jau, who was for many years the most powerful chief of the Tinjar Sebops. He had long resisted the advances of the Resident, and had submitted to the Rajah's government only after a long course of patient persuasion. He had regarded himself as the up-river Rajah, and had never ceased to regret the old state of affairs. "I'm an old man now," he told the Resident, "but if I were as salt as I used to be, the Rajah would not have taken possession of the Baram without a struggle." Another of his many picturesque sayings seems worth recording: "Your Rajah may govern the down-river people; they are inside the Sultan's fence and he had the right

to hand them over. But over us he had no authority; we are the tigers of the jungle and have never been tamed." He had frequently threatened to attack the fort; and when he had sent to the Resident a message to that effect in the usual symbolic language, the latter's only reply had been to go up to his house with two or three men only, and to spend five days there as Aban Jau's guest, and to persuade him to come down to Claudetown to meet the Rajah.

The evening was spent in discussing the prospects of the expedition with Juman and other chiefs, some of whom took a gloomy view. The following morning the steam-launch was sent downriver, and we took to the boats and paddled a short stage to Bawang Takun, another large Kayan village, where we stayed over-night to give the people time to prepare their boats and the Resident the opportunity for some judicial inquiries. There was heavy rain throughout the night, and in the morning the river, which in this part of its course runs between limestone cliffs, was rushing so rapidly that we could only make progress by repeatedly crossing the river to seek the slack-water side of each reach. Failing to reach any village, we passed the night in rude shelters on the bank. On the following day the river was still in flood, but we reached Long Lawa, a Kayan village, and decided to wait there until the river should subside to a more normal condition. Here a party of Kenyahs met us, sent by Tama Bulan to conduct us to his house some two or three days' journey up the Pata tributary. On the morning of the 16th the river had fallen ten feet, and starting at daybreak we reached the mouth of the Pata, and camped on a KERANGAN or pebble-bed beautifully situated among the forest-clad slopes a little way up the Pata. In the course of the day a boatful of Kayans from the Apoh had joined us. On the 17th we had an exciting day working up the rapids and waterfalls of the Pata, and reached Long Lutin, a very large Kayan village of many long houses, most pleasantly situated and surrounded by hills clothed with the rich green of the young PADI crop. Here we spent the night in the house of the principal chief, Laki Lah, a quaint old bachelor, whom we greatly astonished by eating plum-pudding with burning brandy upon it.

Another day's journey over a long series of rapids brought us to the house of Tama Bulan, at that time the most influential chief of the Baram. We found there a number of Kenyah chiefs from the upper reaches of the Pata awaiting our arrival. Tama Bulan, who was strongly in favour of carrying through the Resident's plan, eloquently supported it during the hospitable procedures of the evening, assuring the assembled chiefs that the journey would finally resolve the troubles of the Baram. As usual there was no lack of enterprise and "go" among the Kenyahs, and they were all keen to make the venture; while the Kayans on the other hand were, as always, more cautious, more inclined to dwell on the possibilities of failure, and slower to take up the plan and make it their own. The Kenyahs had not yet completed the taking of omens for the expedition, and the following days were devoted to this process (see vol. ii. p. 52), Tama Bulan and his people taking omens for the whole of the Kenyah contingent, while Juman went on to prepare the people of the Akar. In the course of the day Tama Bulan accompanied us on visits to several neighbouring Kenyah villages situated a little farther up the river. In the evening we had another convivial meeting with great flow of oratory and rice-spirit. On the third day, favourable omens having been observed, sacrifices of pigs and fowls were offered before the altar-posts of the war-god, and the various rites needful to complete the preparation for a long journey were performed (see Pl. 157). In the afternoon the Resident inspected the site for a bungalow or block-house which the Kenyahs proposed to make (and have since erected) for the use of the government's officers.

On October 23rd we left Tama Bulan's house with a party of about one hundred all told, in several boats. We were joined at Long Lutin by Laki Lah and a boatful of his Kayans, made a rapid passage to Long Pata (the spot where the Pata joins the Baram), and resumed the toilsome ascent of the main river to reach the Akar. That evening we reached a Kenyah village at Long Lawan, and as usual we were hospitably entertained with the fatted pig and brimming cups of rice-spirit. The weather was now brilliantly fine and the river of only normal swiftness, and we passed the night in a Kenyah house in the Akar. Here we spent two days awaiting the arrival of a party of Kayans from the upper Akar. The Kayans having arrived, another general discussion of the plan of operations was held; and on the third day the expedition returned to the Baram, and after surmounting the difficulties presented by many rapids and a narrow gorge at Batu Pita, entered the Silat on the 28th. The Silat is the uppermost of the large tributaries of the Baram (Pl. 200). It descends from the Madang country, winding round the foot of the Batu Tujoh, a limestone mountain of 5000 feet. All this country is at a considerable height above sea-level (1000 feet and more), and the climate is much cooler and more bracing than that of the lower levels. It is a land of many streams and hills. All the lower slopes have been cleared and cultivated by the Kenyahs, so that it presents a more open and smiling aspect than the lower country, where the clearings are but tiny islands in the vast ocean of



gloomy forest. The river itself is even more beautiful than the other tributaries of the Baram, lovely as all these are in their upper reaches. This was not the first exploration of the Silat, for the Resident had twice before journeyed up its lower reaches; but on this occasion it was necessary to penetrate to its very head, in order to reach the villages of the principal Madang chiefs, Saba Irang and Tama Usun Tasi. So for five days the expedition toiled up the Silat, and during these days Juman, Laki Lah, and most of the Kayans turned back, their confidence being shaken by the unfamiliar aspect of the country, by the neighbourhood of the hitherto hostile Madangs, and by the bad dream of one of their chiefs and the illness of another. On the fifth day the diminished fleet of boats entered the Lata, a tributary coming down from the Mudong Alan and Saat mountains, from the slopes of which the water runs also to the Rejang River and the Batang Kayan. Here the boats were left behind and the expedition went forward on foot, making but slow progress in the rocky river-bed.

Near the mouth of the Lata the expedition was met by a large party of Kenyahs — men, women, and children — the whole population of a Kenyah village of the Batang Kayan, Lepu Agas by name, who had just arrived with the intention of making their home in that neighbourhood. These people had been the greatest enemies of Tama Bulan, and the feud had only been healed in the previous year.

A curious custom, which seems at the present time to be peculiar to the Kenyahs and rapidly dying out among them, was observed by the Lepu Aga people on this occasion. As the Resident's party approached the spot where they awaited its arrival, they sent out three men to establish the first contact. It was the function of these three men to make sure of the friendly intentions of the approaching party (Pls. 201, 202). They wore large wooden masks elaborately carved, and bearing great lateral projections like horns or antlers, in addition to full war dress.[215] They advanced down a long pebblebank, keeping step and making grotesque movements with heads and arms, which seemed to imply a mixture of caution and curiosity. After dodging about for some time, they came near and inquired: "Who are you? Whence do you come? What is your business?" Having obtained satisfactory assurances, they retreated, stepping backwards with the same grotesque gestures, and returned to report the results of their investigations to their chief.

Before friendly intercourse between the parties could begin it was still necessary, in view of the recent feud between them, that they should engage in a sham fight (JAWA). When this boisterous ceremony had been accomplished, the Resident presented to the Lepu Agas a number of presents, calculated to whet their appetite for the products of civilised industry to be found in the Baram bazaar. Very soon all suspicion and reserve were overcome, and all the men of the Resident's party turned to with hearty goodwill to help build a house for their former enemies. So well did they work that between sunrise and sunset a house of forty doors was hewn out of the forest, solidly constructed, and roofed; so that when night fell the new-comers were able to move in and to invite their helpers to a convivial meeting in its long gallery. The Resident made a speech in native fashion, saying that his party had ventured to build a rude hut in order to provide a night's shelter for their new friends, and hoped that they would find it sufficient for the moment. Tama Bulan also spoke, saying how now the old troubles were over, never to come again. Aban Jalong, the old chief of the Batang Kayan people, was so touched by these unwonted demonstrations of goodwill, that he wept and could with difficulty find words in which to express the gratitude of himself and his people. Through these people messages of goodwill and invitations to the proposed peace-making at Claudetown were sent to their former neighbours in the Batang Kayan, and these in due time bore good fruit. For in the course of the next few years several communities followed the example of the Lepu Agas, and moved over from the Batang Kayan to the Baram. It may be of interest to add that the Lepu Agas still inhabit the house built under these extraordinary circumstances. After some few more days of travelling up-river, we were met by a party of Madangs who had been sent down to meet the Resident; while awaiting his arrival they had hewed out a small boat, and in this, which served almost as much the purposes of a sledge as of a boat, they hauled him over rocks and rapids and still pools until, having outpaced the rest of the party, they brought him, on the eighth day from leaving the Silat, to their village at the foot of Mudong Alan. It was a large village comprising nine long houses disposed in a circle and containing probably not less than 2000 persons. Here he was received on the bank of the stream by a large body of Madangs headed by Tama Usun Tasi, who at once offered him the hospitality of his roof. The incidents of the visit have been described by the Resident, and passages from his account may here be transcribed: —

My Kenyah friends had not arrived yet, but I thought it best to go with him (Tama Usun Tasi) at once; afterwards I congratulated myself on my decision, when I found that, according to custom, Tama Bulan and his

followers (being unable to enter the house until all cases of blood–money between his people and the Madangs had been settled) were obliged to camp near the river for one night. The Madangs assisted in making huts for my followers, gave them several pigs, and sent down their women laden with baskets full of rice; so no want of hospitality marred our reception. In the evening I took a walk round the village, followed by a crowd of women and children, who appeared greatly pleased to find that the white man was able to converse with them in the Kenyah tongue. Then, as the crowd increased, I sat down on a log and produced a few pounds of tobacco, and the whole party was soon chatting and laughing as if they had known me for years. I have often noticed that the women of the Kenyah tribe in the interior are far more genial and less shy than those of other communities, and I believe that the surest sign of the good faith of natives such as these is that the women and children come out to greet one unattended by the men. The sounds of our merriment soon attracted the attention of the men, and as they strolled over and joined us in gradually increasing numbers, the possibility of any disturbance taking place between these people and mine quickly vanished from my mind.

On the following morning several parties of Madangs from other villages came in, numbering in all about 600, and exchanged presents of weapons with my people. It was necessary that the gods should be consulted as to whether the meeting was really in the interests of peace or not. So a pig was caught and tied by the legs, and when all the Madangs were assembled in Tama Usun Tasi's house, the pig was brought in and placed in front of the chiefs. Then one of the head men from a neighbouring village took a lighted piece of wood and singed a few of the bristles of the pig, giving it a poke with his hand at the same time, as if to attract its attention, and calling in a loud voice to the supreme being, "Bali Penyalong." Then, talking at a great rate and hardly stopping for a moment to take breath, he asked that, if any one had evil intentions, the truth might be revealed before the evilly disposed one was allowed to enter the Madang houses, and that, if any Madang, whether related to him or not, wished to disturb the peace which was about to be made with the Baram people, his designs should be revealed. The old man stood waving his hands as if to sweep within the circle of his influence the whole of the assembled crowd, and then, jumping into the air with great violence, brought both feet down on the plank floor with a resounding thump; then, spinning round on one foot with his arm extended, he quickly altered the tone of his voice to a more gentle pitch, and, quivering with excitement, quietly sank down into his place amid a dead silence. The speech was a stirring one, and created an impression. Others spoke a few words to the pig, and it was then taken to one side and stabbed in the throat with a spear, after which the liver was taken out and examined. I should mention that a pig intended to serve the same purpose was provided by the Madangs for our people, who were still waiting to be invited to the house.

Having years before studied the beliefs of the natives with regard to divination by pigs' livers, and knowing the great importance attached to it, I was as anxious as any one to see the liver. I saw at a glance that the omen was good, and seized the opportunity to make the most of it. I quickly called the chiefs' attention to all the good points before they had given their own opinion, and at once saw that their interpretation was the same as my own, and that they were somewhat surprised to find it so.

Thereupon two messengers were sent backwards and forwards to discuss the number of people killed on either side from time to time, and big gongs, shields, and weapons of all kinds changed hands as blood–money. When all had been settled, notice was given to our people that the Madangs were ready to receive them into their houses, and the Baram people sent a message back that they were prepared to accept the invitation. When Kayans and Kenyahs who have been at feud desire to meet peaceably, it is necessary to go through a sort of sham fight, called JAWA, so that both parties can, as it were, blow off steam. As this ceremony is generally executed with much vigour by fully armed parties, it often happens that some people are badly hurt; and I was half afraid that such an accident might check the progress of our negotiations. But the omens had been favourable, and the implicit belief in such omens goes far to prevent bad feeling. About midday Tama Bulan and his followers, in full war costume, announced their intention of moving by bursting into the war–cry, a tremendous roar which was immediately answered by the people in the houses. The noise and excitement increased as the Baram people neared the house of Tama Usun Tasi, and guns with blank charges were fired. On came the Baram people, stamping, shouting, and waving their weapons in defiance, the Madangs in the houses keeping up a continuous roar. When the Baram people first attempted to enter the house, they were driven back, and a tremendous clashing of shields and weapons took place; then the Madangs retreated from the entrance in order to allow their visitors to come in, stamping and making the most deafening noise. When the Baram people had all entered, the Madangs once more

rushed at them, and for some two minutes a rough-and-tumble fight continued, in which many hard blows were given. No one received a cut, however, except one man who, running against a spear, was wounded in the thigh; but the affair was quickly settled by the payment of a pig and a small spear to the wounded person; so the ceremony may be said to have ended without a mishap. When quiet had been restored, we all sat down and rice-spirit was produced, healths drunk, and speeches made; food was brought out and given to the visitors in the long verandah, as, on first being received, visitors are not allowed to enter the rooms; and the convivialities were prolonged far into the night.

In the evening of the following day the Madangs prepared a feast for all present, and afterwards a great deal of rice-spirit was drunk and some very good speeches made, former troubles and difficulties being explained and discussed in the most open manner. Each chief spoke in turn, and concluded his speech by offering drink to another and singing a few phrases in his praise, the whole assembly joining in a very impressive chorus after each phrase and ending up with a tremendous roar as the bamboo cup was emptied.

The following day the Madangs collected a quantity of rubber for their first payment of tribute to the government, namely, \$2.00 per family, and as we had no means of weighing it except by guesswork, it was decided that Tama Bulan and two Madang headmen should act as assessors, and decide whether the piece of rubber brought by each person was sufficiently large to produce \$2.00. It took these men the whole day to receive it all, and much counting was done on the fingers and toes.

On taking our departure from the Madang country, most of the women presented us with a small quantity of rice for food on our homeward journey, but as each little lot was emptied into a large basket, the giver took back a few grains so as not to offend the omen-birds, who had bestowed on them a bounteous harvest, by giving the whole away to strangers. Presents of considerable value were given on both sides, and all parted the best of friends. The two principal Madang chiefs accompanied us for a day's journey, their followers carrying the whole of our baggage. On parting I promised to arrange a similar peace-making at Claudetown, at which most of the Baram chiefs would be present.

We add an account of the peace-making previously published by one of us.[216]

The peace-making that I am going to describe was organised in order to bring together on neutral ground, and in presence of an overwhelming force of the tribes loyal to the government, all those tribes whose allegiance was still doubtful, and all those that were still actively hostile to one another, and to induce them to swear to support the government in keeping the peace, and to go through the formalities necessary to put an end to old blood-feuds. At the same time the Resident had suggested to the tribes that they should all compete in a grand race of war canoes, as well as in other races on land and water. For he wisely held that in order to suppress fighting and head-hunting, hitherto the natural avenues to fame for restless tribes and ambitious young men, it is necessary to replace them by some other form of violent competition that may in some degree serve as a vent for high spirits and superfluous energy; and he hoped to establish an annual gathering for boat racing and other sports, in which all the tribes should take part, a gathering on the lines of the Olympic games in fact. The idea was taken up eagerly by the people, and months before the appointed day they were felling the giants of the forest and carving out from them the great war canoes that were to be put to this novel use, and reports were passing from village to village of the many fathoms length of this or that canoe, and the fineness of the timber and workmanship of another.

In order to make clear the course of events, I must explain that two large rivers, the Baram and the Tinjar, meet about one hundred miles from the sea to form the main Baram river. Between the peoples living on the banks of these two rivers and their tributaries there is a traditional hostility which just at this time had been raised to a high pitch by the occurrence of a blood-feud between the Kenyahs, a leading tribe of the Baram, and the Lirongs, an equally powerful tribe of the Tinjar. In addition to these two groups we expected a large party of Madangs, a famous tribe of fighting men of the central highlands whose hand had hitherto been against every other tribe, and a large number of Sea Dayaks, who, more than all the rest, are always spoiling for a fight, and who are so passionately devoted to head-hunting that often they do not scruple to pursue it in an unsportsmanlike fashion. So it will be understood that the bringing together in one place of large parties of fully armed warriors of all these different groups was a distinctly interesting and speculative experiment in peace-making.

The place of meeting was Marudi (Claudetown), the headquarters of the government of the district. There the

river, still nearly a hundred miles from the sea, winds round the foot of a low flat-topped hill, on which stand the small wooden fort and court-house and the Resident's bungalow. Some days before that fixed for the great meeting by the tokens we had sent out, parties of men began to arrive, floating down in the long war canoes roofed with palm leaves for the journey. On the appointed day some five thousand of the Baram people and the Madangs were encamped very comfortably in leaf and mat shelters on the open ground between our bungalow and the fort, while the Sea Dayaks had taken up their quarters in the long row of Chinamen's shops that form the Marudi bazaar, the commercial centre of the district. But as yet no Tinjar folk had put in an appearance, and men began to wonder what had kept them — Were the tokens sent them at fault? Or had they received friendly warnings of danger from some of the many sacred birds, without whose favourable omens no journey can be undertaken? Or had they, perhaps, taken the opportunity to ascend the Baram and sack and burn the Kenyah houses now well nigh empty of defenders? We spent the time in foot-racing, preliminary boat-racing, and in seeing the wonders of the white man. For many of these people had not travelled so far downriver before, and their delight in the piano was only equalled by their admiration for that most wonderful of all things, the big boat that goes up stream without paddles, the Resident's fast steam-launch.

At last one evening, while we were all looking on at a most exciting practice-race between three of the canoes, the Lirongs, with the main mass of the Tinjar people, came down the broad straight reach. It was that most beautiful half-hour of the tropical day, between the setting of the sun and the fall of darkness — the great forest stood black and formless, while the sky and the smooth river were luminous with delicate green and golden light. The Lirongs were in full war dress, with feathered coats of leopard skin and plumed caps plaited of tough rattan, and very effective they were as they came swiftly on over the shining water, sixty to seventy warriors in each canoe raising their tremendous battle-cry, a deep-chested chorus of rising and falling cadences. The mass of men on the bank and on the hill took up the cry, answering shout for shout; and the forest across the river echoed it, until the whole place was filled with a hoarse roar. The Kenyahs ran hastily to their huts for their weapons, and by the time they had grouped themselves on the crest of the hill, armed with sword and shield and spear and deadly blowpipe, the Lirongs had landed on the bank below and were rushing up the hill to the attack. A few seconds more and they met with clash of sword and shield and a great shouting, and in the semi-darkness a noisy battle raged. After some minutes the Lirongs drew off and rushed back to their boats as wildly as they had come; and, strange to say, no blood was flowing, no heads were rolling on the ground, no ghastly wounds were gaping, in fact no one seemed any the worse. For it seems that this attack was merely a well understood formality, a put-up job, so to say. When two tribes, between whom there is a blood-feud not formally settled, meet together to make peace, it is the custom for the injured party, that is the tribe which has last suffered a loss of heads, to make an attack on the other party but using only the butt ends of their spears and the blunt edges of their swords. This achieves two useful ends—it lets off superabundant high spirits, which, if too much bottled up, would be dangerous; and it "saves the face" of the injured party by showing how properly wrathful and bellicose its feelings are. So when this formality had been duly observed everybody seemed to feel that matters were going on well; they all settled down quietly enough for the night, the Resident taking the precaution to send the Lirongs to camp below the fort; and the great peace-conference was announced to be held the following morning.

Soon after daybreak the people began to assemble beneath the great roof of palm-leaf mats that we had built for a conference hall. The Baram chiefs sat on a low platform along one side of the hall, and in their midst was Tama Bulan, the most famous of them all, a really great man who has made his name and influence felt throughout a very large part of Borneo. When all except the Tinjar men were assembled, of course without arms, the latter, also unarmed, came up the hill in a compact mass, to take their places in the hall. As they entered, the sight of their old enemies, the chiefs of the Baram, all sitting quietly together, was too much for their self-control; with one accord they made a mad rush at them and attempted to drag them from the platform. Fortunately we white men had placed ourselves with a few of the more reliable Dayak fortmen between the two parties, and partly by force and partly by eloquence we succeeded in beating off the attack, which seemed to be made in the spirit of a school "rag" rather than with bloody intent. But just as peace seemed restored, a great shout went up from the Baram men, "Tama Bulan is wounded"; and sure enough there he stood with blood flowing freely over his face. The sight of blood seemed to send them all mad together; the Tinjar people turned as one man and tore furiously down the hill to seize their weapons, while the Baram men ran to their huts and in a few seconds were prancing madly to and fro on the crest of the hill, thirsting for the onset of the bloody battle that now seemed a

matter of a few seconds only. At the same time the Dayaks were swarming out of the bazaar seeking something to kill, like the typical Englishman, though not knowing which side to take. The Resident hastened after the Tinjars, threw himself before them, and appealed and threatened, pointing to the two guns at the fort now trained upon them; and Tama Bulan showed his true greatness by haranguing his people, saying his wound was purely accidental and unintended, that it was a mere scratch, and commanding them to stand their ground. Several of the older and steadier chiefs followed his example and ran to and fro holding back their men, exhorting them to be quiet.

The crisis passed, the sudden gust of passion slowly died away, and peace was patched up with interchange of messages and presents between the two camps. The great boat race was announced to take place on the morrow, and the rest of the day was spent in making ready the war canoes, stripping them of their leaf roofs and all other superfluous gear.

At daybreak the racing-boats set off for the startingpost four miles up river. The Resident had given strict orders that no spears or other weapons were to be carried in the racing-boats, and as they started up river we inspected the boats in turn, and in one or two cases relieved them of a full complement of spears; and then we followed them to the post in the steam-launch. There was a score of entries, and since each boat carried from sixty to seventy men sitting two abreast, more than a thousand men were taking part in the race. The getting the boats into line across the broad river was a noisy and exciting piece of work. We carried on the launch a large party of elderly chiefs, most of whom were obviously suffering from "the needle," and during the working of the boats into line they hurled commands at them in language that was terrific in both quality and volume. At last something like a line was assumed, and on the sound of the gun the twenty boats leaped through the water, almost lost to sight in a cloud of spray as every one of those twelve hundred men struck the water for all he was worth. There was no saving of themselves; the rate of striking was about ninety to the minute, and tended constantly to increase. Very soon two boats drew out in front, and the rest of them, drawing together as they neared the first bend, followed hotly after like a pack of hounds. This order was kept all over the course. During the first burst our fast launch could not keep up with the boats, but we drew up in time to see the finish. It was a grand neck-and-neck race all through between the two leading boats, and all of them rowed it out to the end. The winners were a crew of the peaceful down-river folk, who have learnt the art of boat-making from the Malays of the coast; and they owed their victory to their superior skill in fashioning their boat, rather than to superior strength. When they passed the post we had an anxious moment -- How would the losers take their beating? Would the winners play the fool, openly exulting and swaggering? If so, they would probably get their heads broken, or perhaps lose them. But they behaved with modesty and discretion, and we diverted attention from them by swinging the steamer round and driving her through the main mass of the boats. Allowing as accurately as possible for the rate of the current as compared with the rate of the tide at Putney, we reckoned the pace of the winning boat to be a little better than that of the 'Varsity eights in racing over the full course.

The excitement of the crowds on the bank was great, but it was entirely good-humoured -- they seemed to have forgotten their feuds in the interest of the racing. So the Resident seized the opportunity to summon every one to the conference hall once more. This time we settled down comfortably enough and with great decorum, the chiefs all in one group at one side of a central space, and the common people in serried ranks all round about it. In the centre was a huge, gaily painted effigy of a hornbill, one of the birds sacred to all the tribes, and on it were hung thousands of cigarettes of home-grown tobacco wrapped in dried banana leaf. Three enormous pigs were now brought in and laid, bound as to their feet, before the chiefs, one for each of the main divisions of the people, the Barams, the Tinjars, and the hill-country folk. The greatest chiefs of each of these parties then approached the pigs, and each in turn, standing beside the pig assigned to his party, addressed the attentive multitude with great flow of words and much violent and expressive action; for many of these people are great orators. The purport of their speeches was their desire for peace, their devotion to the Resident ("If harm come to him, then may I fall too," said Tama Bulan), and their appreciation of the trade and general intercourse and safety of life and property brought them by the Rajah's government; and they hurled threats and exhortations against unlicensed warfare and bloodshed.

As each chief ended his speech to the people he turned to the pig at his feet, and, stooping over it, kept gently prodding it with a smouldering fire-brand, while he addressed to it a prayer for protection and guidance -- a prayer that the spirit of the pig, soon to be set free by a skilful thrust of a spear into the beast's heart, should carry

up to the Supreme Being. The answer to these prayers might then be read in the form and markings of the underside of the livers. So the pigs were despatched, and their livers hastily dragged forth and placed on platters before the group of chiefs. Then was there much anxious peering over shoulders, and much shaking of wise old heads, as the learned elders discussed the omens; until at last the Resident was called upon to give his opinion, for he is an acknowledged expert in augury. He was soon able to show that the only true and rational reading of the livers was a guarantee of peace and prosperity to all the tribes of the district; and the people, accepting his learned interpretation, rejoiced with one accord. Then the Resident made a telling speech, in which he dwelt upon the advantages of peace and trade, and how it is good that a man should sleep without fear that his house be burnt or his people slain; and he ended by seizing the nearest chief by the hair of his head, as is their own fashion, to show how, if a man break the peace, he shall lose his head.

This concluded the serious part of the conference, and it only remained to smoke the cigarettes of good fellowship, taken from the hornbill-effigy, and to drink long life and happiness to one another. So great jars of "arack" were brought in and drinking vessels, and each chief in turn, standing before some whilom enemy, sang his praises in musical recitative before giving him the cup; and after each phrase of the song the multitude joined in with a long-drawn sonorous shout, which, while the drink flowed down, rose to a mighty roar. This is a most effective way of drinking a man's health, and combines the advantages of making a speech over him and singing "For he's a jolly good fellow"; moreover, the drink goes to the right party, as it does not with us. It should be adopted in this country, I think. By many repetitions of this process we were soon reduced to a state of boisterous conviviality; and many a hard-faced old warrior, who but the day before had drawn his weapons against his enemy, now sat with his arms lovingly thrown about that same enemy. When this state of affairs was reached, our work seemed to be accomplished, and we white men retired to lunch, leaving one chief in the midst of a long-winded speech. As soon as the restraint of the Resident's presence was removed, the orator began to utter remarks of a nature to stir up the dying embers of resentment; at least so it seemed to one wily old chief, a firm supporter of the government, who bethought him to send one of his men to pull away the palm-leaf mats from above the indiscreet orator, and so leave his verbosity exposed to the rays of the mid-day sun. No sooner said than done, and this was the beginning of the end; for others following suit made a rush for the mats that would be so useful in making their camps and boats more rain-proof. There was a mighty uproar that brought us headlong to the scene, only to see the big hall melt away like a snowflake as hundreds of hands seized upon the mats and bore them away in triumph. So the great peace conference was brought to an end amid much laughter and fun.

It only remained for the chiefs to pay in the taxes for the year -- the two dollars per family which it is their business to collect from their people, and which is the only tax or tribute claimed by the Rajah. This business was got through on the following morning; and then we said many kind farewells, as the various parties set out one after another in the great war canoes on their long up-stream journey; some of them to battle for many days against the swiftly flowing river, and after that again for many days to pole their boats through the flashing rapids and over the lovely quiet reaches, where the rare gleams of sunlight break through the overarching forest; until, coming to their own upland country, where anxious wives and children are waiting, they will spread even in the remotest highlands the news of the white man's big boat that goes of itself against the stream, of the great boat-race, and of how they came wellnigh to a fearful slaughtering, and how they swore peace and goodwill to all men, and how there should be now peace and prosperity through all the land, for the great white man who had come to rule them had said it should be so, and the gods had approved his words.

The foregoing account of the journey to the Madang country and of the subsequent events would constitute the last chapter of any history of the pacification of the Baram. Since the time of those incidents, there has been no serious disturbance of the peace; and there seems to be good reason to hope that, so long as the Rajah's government continues to be conducted along the same lines, there will be no recrudescence of savagery. The last case of fighting on any considerable scale occurred in 1894, when Tama Bulan's people, resenting the offensive conduct of bands of Sea Dayaks who had penetrated to their neighbourhood in search of jungle-products, turned out and took the heads of thirteen of the Dayaks. It was only after prolonged negotiation that the Dayaks were persuaded to resign their hopes of a bloody revenge and to accept a compensation of 3000 dollars, which was paid by the Kenyahs at the Rajah's order.

It has not always been possible to make peace prevail by wholly peaceable procedures. The Baram was fortunate in that the Sea Dayaks had not established themselves anywhere within its borders. In the Rejang, on the

other hand, large numbers of them were allowed to settle, coming in from the Saribas and the Batang Lupar in the early days of the Rajah's government. And since the Kayans and Kenyahs were already in possession of the upper river and considered themselves the dominant tribes and lords of the land, it was inevitable that there should grow up a keen rivalry which could hardly fail to lead occasionally to armed conflict. For the Sea Dayaks had been accustomed to adopt a somewhat swaggering and domineering attitude towards the Klemantan tribes, and could not easily learn to modify it when they came in contact with the prouder and less submissive Kayans and Kenyahs. This rivalry has been the source of most of the troubles of the Rejang, where, since the big expedition of 1863, the Rajah and his officers have on several occasions found it necessary to subdue recalcitrant tribes or communities by leading armed forces against them.

As an illustration of these sterner methods we add a brief account of one such expedition led by one of us (C. H.) in the year 1904, in his capacity of Divisional Resident of the several Rejang districts; an expedition which, there is reason to hope, may prove to be the last of the series. The purpose of this expedition was to reduce to order a small community of Sea Dayaks that was established upon Bukit Batu, an almost impregnable mountain which rises up almost perpendicularly on all sides at the head of the Bali, one of the eastern tributaries of the Rejang. This community had been formed in the manner to which legend assigns the foundation of ancient Rome, namely, by the gathering together in this strong place of various outlaws and violent characters who for one reason or another had quarrelled with and defied the government. The same spot had been similarly occupied many years before; and though it had been forcibly cleared of its defenders, its natural advantages had, in the course of years, led to the growth of a new community of the same kind.

This band had raided the surrounding country, slaying and robbing people of several tribes, and generally had been having a "gorgeous time." They had repeatedly refused to yield even when threatened by armed force. And when the Resident sent them a peremptory message, commanding them to appear to surrender themselves at the nearest government station within one month, they returned an impudent answer, saying that they had so far accepted orders from no one, and asking — Who was he that they should obey him? Steps were at once taken to enforce obedience. Since to storm the hill might well cost many lives, it seemed preferable to try to lure its defenders from their stronghold. The Resident, without giving the brigands further warning, went up the Rejang with a single boat's crew to a point about 150 miles above the mouth of the Bali, the tributary that flows past Bukit Batu. At this point another tributary, the Bukau, coming from near the opposite side of Bukit Batu, joins the Rejang. Here he collected a force of some 200 Kayans and Klemantans, and led them up to the head of the Bukau and then on foot through the jungle to the neighbourhood of Bukit Batu. The route by which the brigands usually passed to and from their fastness was at a spot near the river, where rude ladders of wood and rattan had been fixed to facilitate the ascent and descent of the precipitous foot of the hill. Near this spot the force was divided into two parties, which were stationed in the jungle at some little distance from the ladders, right and left of the path to the river; and a party of ten active men was detached, with instructions to hang about the foot of the ladders and to retreat along the path to the river if they were attacked. On the second day the Ibans on the mountain snapped at the bait. About forty of them descended stealthily and then rushed upon the small party, hoping to hunt down in the jungle all whom they could not strike down on the spot, and thus to secure ten heads and enjoy the frenzy of slaughter. The ten decoys fled swiftly down the path, and the supporting parties, guided by the yells of the Ibans, closed in from both sides and fell upon them. A few of the rebels were killed, without any fatal casualties to the Resident's party. The rest fled through the jungle and many of them were afterwards arrested. Those who remained on the hill promptly drew up the ladders and hurled down rocks. To have carried the hill by storm would still have been most difficult and costly, and, as it proved, a needless feat. The Resident therefore contented himself with destroying all the property of the brigands that was within reach, including a number of valuable jars and gongs which they had secreted in a cave at the foot of the hill, and the fields of young PADI on which they were largely dependent for their food-supply. For he well knew that this procedure would render the spot hateful to the Ibans; for the scene of a disaster, especially one where they have been worsted in fight, becomes an object of superstitious dread. The Resident therefore led back his party by the way they had come, dismissed them to their homes, and returned down river to Sibu, after sending a command to those remaining on the hill that they should present themselves forthwith at Kapit. The order was obeyed; fines, pledges, and compensations to relatives of their victims were paid in; and the principal men were ordered to reside for a year in the neighbourhood of Sibu Fort and afterwards to return to their native districts.

It should be added that these Ibans frankly acknowledged that the Resident had been too clever for them, and that they bore him no ill-will; and that some of them, accompanying him on later excursions, proved themselves willing helpers and agreeable companions.

Other and larger expeditions of armed forces have in the past been led against tribes or villages, generally on account of their having refused to surrender to the government members guilty of taking heads or of attacking other villages wantonly and without permission. In all cases the government officers have relied almost exclusively upon the services of bodies of natives under the immediate charge of their own chiefs and armed only with their native weapons. In some cases the offending parties have fled from their villages without offering active resistance; and in these cases the government force has usually been content to inflict punishment by burning down their houses and taking what property was left in them.

It is perhaps too much to hope that no cases of taking heads or of wanton attack on jungle parties or on weak villages will ever again occur. But such incidents have become very infrequent and the offenders have seldom escaped punishment; for, unlike our own population, many thousands of whom live detached from all local bonds as isolated floating units unknown to the government and to those among whom they dwell, every man in Sarawak, with the partial exception of the nomad jungle-dwellers, is a member of some local group which is held responsible by the government for his good behaviour; thus in every district every man is known, if not as an individual, at least as a member of some community; and every stranger (or party of strangers) is expected to be able to give a satisfying account of himself; and any who wish to work in the jungle of any district other than their own are required to have government permission. It is thus impossible for any criminal to conceal himself for any length of time from the government; and so sure is it of effecting arrest, when necessary, that accused persons are frequently allowed to attend to their farms and follow their ordinary occupations pending the time of their trial. Even when a man accused of a serious offence flees across the border to Dutch territory, he is generally apprehended by the Dutch officers sooner or later and sent round to Kuching by sea.

The raising of the taxes from the people to defray the expenses of government has raised no difficulties. The door-tax of two dollars[217] per door (I.E. per family or household) is the only direct tax laid on the tribes. When once the initial reluctance has been overcome, this has been collected and regularly paid in by chiefs and PENGHULUS, including the headmen of the nomad groups. In times of misfortune, whether individual or collective, such as the loss of crops or of a house by fire, the tax is remitted; and no tax is expected from men over sixty years of age, from cripples or invalids, or from widows.

The Sea Dayaks alone pay a door-tax of one dollar only, it having been understood from the early days, when they were the only fighting tribe with which the Rajah was intimately acquainted, that they are liable at any time to be called upon by the government to render assistance in punitive expeditions or in other public works, such as procuring timber for government buildings. But this holds good only for those who remain in the districts in which they have long been settled.

The sum raised by direct taxation forms now but a small part of the total revenue of the State of Sarawak; for the development of trade and agriculture, especially the cultivation of pepper and sago and rubber, and the growing capacity and facilities for the purchase of imported goods by the people even of the remotest parts, enable the government to raise a considerable revenue by indirect taxation in the form of customs duties.

The minerals, worked in the main by the Borneo Company,[218] principally gold, antimony, and mercury, have also been an important source of revenue. The recent discovery of supplies of petroleum promises to result in an important addition to the wealth of the country.[219] But these various commercial and industrial developments affect hardly at all the lives of the pagan tribes, So far as they are concerned, the work of the government may be summed up by saying that it has suppressed the chronic warfare which kept them all in a state of armed hostility and uneasy distrust of one another; that it has suppressed head-hunting and crimes of violence, has rendered life and property secure, and has administered justice with a firm hand and a strict regard to the customs and traditional sentiments of the people; that it has wellnigh extinguished slavery; that it has opened the whole country to trade, and, by thus improving the facilities for sale of the jungle produce, has increased the purchasing power of the people, while bringing within the reach of all of them the products of civilised industry that they most value; and that while it has strictly regulated the sale of those products, such as fire-arms and strong liquor, which have proved detrimental to so many other peoples of the lower culture, it has encouraged the people to cultivate a greater variety of vegetable products, especially sago, coconuts, pepper, and rubber, and to



improve the methods of cultivation of PADI. Lastly, the government has rendered possible the establishment of a number of excellent mission schools in older stations, where considerable numbers of children of the pagan tribes have been made Christians and trained to fill subordinate posts in the administrative service, or to return to leaven the native villages with a wider knowledge and a better understanding of the principles which underlie the white man's conduct and culture. The missionaries have exerted also among the Sea Dayaks a strong influence making for peace and order; but they have hardly yet come into contact with Kayans or Kenyahs. Mention must also be made of the Malay schools which the government has instituted and supported in the principal stations, and in which many young Malays receive the elements of a useful education.

In all its undertakings the success of the government has only been rendered possible by the high prestige that the white man everywhere enjoys; and this in turn has been acquired and maintained, not so much by his command of the mechanical resources of western civilisation, as by the fact that, with very few exceptions, the white men with whom the natives have had intercourse have been English gentlemen, animated by the spirit and example of the two white Rajahs, and keenly conscious of their individual and collective responsibility as representatives of their race and country in a foreign land.[220]

We have dwelt at some length on the government of the Rajah of Sarawak in its relation with the pagan tribes, and, if we dismiss in a few words the administrative labours of the Dutch and of the British North Borneo Company in their respective territories, it is not because we regard those labours as of less interest and importance or as less successful, but because in the main they have run on similar lines and have achieved similar results to those of the government of Sarawak, of which alone we have intimate knowledge. Dutch Borneo comprises roughly two-thirds of the whole island, a very large territory which comprises the basins of the largest rivers and hence, the rivers being the only highways, the most inaccessible parts of the island. The Kapuas River, for example, is estimated to be nearly 700 miles in length; and the necessity of ascending these hundreds of miles of river-way, much of it difficult and dangerous, has rendered the process of establishing control over the tribes of the interior slow and laborious. For this reason the process is not yet completed; although the Dutch have had stations in Borneo since the early years of the seventeenth century, when they expelled the Portuguese from Bruni and Sambas. But it was not until 1785 that they came into possession of any considerable territory, namely, the Sultanate of Banjarmasin, and not till after the return to them of their East Indian rights in 1816 that they extended their territorial possessions to their present large proportions.

The Dutch settlement and possessions in Borneo were for many years administered by traders and a trading company whose prime object was, of course, profitable trade. The problems of native administration no doubt seemed to them at first of minor importance and interest, and they made many mistakes.[221] But, as with our own great company in India, it became increasingly necessary, if only for the sake of trade, to study the art and policy of administering the affairs of the native population. This has now been done to good effect, and, stimulated possibly by the example of wise paternal government afforded by the Rajahs of Sarawak, the Dutch have established a system of Residents or district officers who have successfully invoked the co-operation of the native chiefs in a manner very similar to that practised in the neighbouring state. And the Dutch officers have of late years shown themselves willing and able effectively to co-operate with those of Sarawak in all matters of common interest, especially in the settlement of troubles on the boundary between their territories. The enlightened interest of the Dutch Government in the welfare of the tribes of the far interior and in the promotion of ethnographical knowledge has been strikingly manifested in the opening years of this century by the despatch of two successive expeditions, under the leadership of Dr. Nieuwenhuis, to study the people, their customs and conditions, and by its generous expenditure upon the publication of the handsome volumes in which he has embodied his valuable reports.[222] On the second journey this intrepid traveller penetrated to the head of the Batang Kayan, and there made the acquaintance of the same Kenyahs who had recently visited the Resident of the Baram. In this way the spheres of Dutch and of British influence have been made to overlap in these central highlands.

The Physical Characters of the Races and Peoples of Borneo  
A. C. Haddon  
Introduction

The following sketch of the races and peoples of Borneo is based upon the observations of the Cambridge Expedition to Sarawak in 1899 and those of Dr. A. W. Nieuwenhuis in his expeditions to Netherlands Borneo in 1894, 1896 — 1897, and 1898 — 1900 (QUER DURCH BORNEO, Leiden, vol. i., 1904, vol. ii., 1907).

It is generally acknowledged that in Borneo, as in other islands of the East Indian Archipelago, the Malays inhabit the coasts and the aborigines the interior, though in some these reach the coast while Malayised tribes have pushed inland up the rivers, a sharp distinction between the two being frequently obliterated where they overlap. The condition, however, is much more complicated as we can now distinguish at least two main races among the aborigines.

We have no evidence as to who were the primitive inhabitants of Borneo. One would expect to find Negritos in the interior, as these black, woolly-haired pygmies inhabit the Andamans, parts of the Malay Peninsula, Sumatra, the Philippines, New Guinea, and possibly Melanesia. No authoritative evidence of their occurrence in Borneo is forthcoming, and one can confidently assert that there are no Negritos in Sarawak. Nor are there any traces of Melaneseans. It is generally admitted that, assuming the Australians to be mainly of that race, a Pre-Dravidian element should occur in the Archipelago, and the cousins Sarasin have noted this strain among the Toalas of Celebes and Moszkowski among the Batins of Sumatra; in this connection it is of interest that Nieuwenhuis discovered ten Ulu Ayars and two Punans with straight hair and a "black or blue-black" skin colour; Kohlbrugge,[223] who records this observation, offers no explanation.

Dr. E. T. Hamy in 1877 recognised a primitive element in the Malay Archipelago, for which he adopted the term Indonesian, a name previously invented by Logan for the non-Malay population of the East Indian Archipelago. De Quatrefages and Hamy further established this stock in their CRANIA ETHNICA (1882), and de Quatrefages in his HISTOIRE GENERALE DES RACES HUMAINES (1889) boldly states that these high- and narrow-headed peoples are "un des rameaux de la branche blanche allophyle" (L.C. pp. 515, 521). Keane terms the Indonesians "the pre-Malay Caucasian element in Oceania" (MAN PAST AND PRESENT, 1899, p. 231). Various investigators[224] have studied skulls obtained from this region which prove the wide extension of dolichocephaly. Kohlbrugge (1898), who investigated the Teriggerese, Indonesian mountaineers of Java, says: "Les Indonesiens sont dolichocephales, les Malais brachycephales ou hyperbrachycephales. Le sang indonesien se decelle donc par la longueur de la tete: plus celle-ci se rapproche du type dolichocephale, plus pur est le sang indonesien." Volz confirms Hagen's observations of the existence among the Battak of North Sumatra of two types, a dolichocephalic Indonesian and a brachycephalic type.

The term Indonesian may now be regarded as definitely restricted to a dolichocephalic, and the term Proto-Malay to a brachycephalic race, of which the true Malays (Orang Malayu) are a specialised branch.

The next point to discuss is the presence of these two races in Borneo. The Dutch Expedition found three distinct types in the interior of Netherlands Borneo, the Ulu Ayars (Ulu Ajar)[225] or Ot Danum of the upper Kapuas, the Bahau-Kenyahs (Bahau-Kenja) of the middle or upper Mahakam (or Kotei) and the upper waters of the rivers to the north, and the Punans, nomadic hunters living in the highlands about the head-waters of the great rivers. The first of these may be classed as predominantly Indonesian and the others as mainly Proto-Malay in origin. According to Nieuwenhuis the Bahaus and Kenyahs both remember that they came from Apo Kayan at the headwaters of the Kayan river; they were formerly known as the Pari tribes. In all the tribes of this group the social organisation is in the main similar, and this affinity is borne out by their material culture, thus they may be regarded as originally one people. Tribes calling themselves Bahau now live along the Mahakam above Mujub and include one Kayan group; on the upper Rejang are Bahau tribes under the name of Kayan, and a small section has advanced into the Kapuas area and settled on the Mendalam which again includes Kayans and kindred tribes. All the tribes still in Apo Kayan call themselves Kenyah, as also those of the eastward flowing Tawang, Berau and Kayan (or Bulungan) rivers and those of the upper Limbang and Baram flowing northwards. The Kenyahs of Apo Kayan live along the Iwan, a tributary of the Kayan river (or Bulungan); to the north-east is another tributary called the Bahau which seems to have been the original home of the Bahau people since the tribes of Borneo habitually take their names from the rivers along which they live.[226]

Nieuwenhuis came to the conclusion that the three chief tribes measured by him represented three main groups of the population of Central Borneo, physically and culturally. Mr. E. B. Haddon drew attention (MAN, 1905 No. 13, p. 22) to the close similarity of the results published by Kohlbrugge (1903) with those published by me (1901). I recognised five main groups of peoples in Sarawak: Punan, Klemantan (or, as Dr. Hose and I then

spelled it, Kalamantan), Kenyah–Kayan, Iban or Sea Dayak, and Malay. The Ibans are not referred to by either of the Dutch ethnologists, who, like myself, merely alluded to the Malay element. Kohlbrugge and I included the Bakatan or Beketan and the Ukit or Bukat in the Punan group, and also bracketed together the Kayans and Kenyahs. In Sarawak there are numerous and often small tribes which it is frequently very difficult or quite impossible to differentiate from one another, although the extremes of the series can be distinguished; we therefore decided to comprehend them under the non-committal term of Klemantan (p. 42). I showed that they were of mixed origin, and stated that, "It is possible that the Kalamantans were originally a dolichocephalic people who mixed first with the indigenous brachycephals (Punan group) and later with the immigrant brachycephals (Kenyah–Kayan group) or the Kalamantans may have been a mixed people when they first arrived in Borneo and subsequently increased their complexity by mixing with these two groups" (L.C. p. 352). I also made it clear that I regarded the dolichocephalic element as of Indonesian stock and the brachycephalic of Proto–Malayan origin. It was with great satisfaction that I found Kohlbrugge had come to similar conclusions and that the Ulu Ayars exhibit such strong traces of an Indonesian origin, stronger perhaps than those of any tribe in Sarawak, with the possible exception of the scarcely studied Muruts and allied tribes.

Kohlbrugge states (1903, p. 2) that he has shown for the interior of Sumatra, Java, and Celebes that there are mesaticephalic peoples distinct in other respects from the coast peoples, but not dolichocephalic. He concludes that the (Ulu Ayar) Dayaks, being the only dolichocephals, are the only pure Indonesians, and the rest (Kayans and Punans) are more or less mixed with Malays. The mean cephalic index of 130 Tenggerese of the interior of Java is 79.7, but the Ulu Ayars constitute a uniform group which ranges from 71 to 81.4, of which 9 are 74 or under and 9 are between 74.1 and 76 inclusive, the median of 26 adult males being 74.7.[227] [Although the median Kalabit index in the living subject is somewhat higher, that of the skulls, as well as the cranial index of Muruts and Trings (Table C), is very similar in this respect to that of the Ulu Ayars.]

According to Nieuwenhuis' statistics, as given by Kohlbrugge, there is in the brachycephalic group (Kayans and Punans) a greater range (75 to 93.3, and 1 Kayan woman reaches 97) than in the Ulu Ayars; most fall between 78 and 85, the medians of both being just over 81. There are 8 dolichocephals[228] out of his 43 Kayan men and 4 out of his 25 women, but only 1 Punan out of 14. In his curve of the Kayan indices there is a drop at 82 [a curve of my data shows a similar drop]. "I leave it an open question," he says (p. 13), "whether this break indicates mixture of a dolichocephalic and brachycephalic group; this can only be decided by the study of more abundant material, and requires confirmation from the geographical and ethnographical standpoint. At all events it may be assumed A priori that if long-headed and broadheaded peoples occur in the interior of Borneo, then mixed peoples will also be met with, and the Kayans might be such." [An examination of my data will show that there is practically no difference between the Kayans and Kenyahs in this respect.]

A comparison is also possible between the bi-zygomatic breadths made by Nieuwenhuis and ourselves. The figures are those of the minimum, median, and maximum. KAYANS (43 [male], N) 126, 139, 153 ; (25 [female], N) 125, 132, 141; (21 [male], H) 132, 141, 150. PUNANS (14 [ERROR: unhandled ], N) 132, 138, 145; (19 [male], H) 130, 142, 154. ULU AYARS (26 [male], N) 125, 136, 145. LAND DAYAKS (42 [male], S) 122, 136, 145.

Kohlbrugge points out that there seems to be no ground for dividing the "Indonesians" into a taller and shorter group since the differences are slight. If this distinction were drawn, the Ulu Ayars (av. 1.571 m., med. 1.551 m.) would belong to the shorter group as would the Enganese (av. 1.570 m.). His 34 Kayan men (av. 1.584 m., med. 1.582 m.) and 14 Punan men (av. 1.583 m., med. 1.569 m.) and the Gorontalese (1.584 m.) are intermediate between these and the Tenggerese (1.604 m.) and Battak (1.605). I also find this distinction untenable, as our Kayans (av. 1.559 m., med. 1.550 m.) and Punans (av. 1.555 m., med. 1.550 m.) are of the same stature or even possibly shorter than his Ulu Ayars, whereas our 16 Kenyah men (av. 1.597 m., med. 1.608) are taller than his Kayans. He adds that the shorter "Indonesians" live in the plains, the taller in the mountains, but he cannot say for certain whether a mountain climate affects stature as many believe. It is to be regretted that Kohlbrugge extends in this instance the term Indonesian to the Kayans and Punans. Taking our measurements I find that the Kenyahs and the Muruts (av. 1.601 m., med. 1.590 m.) are the tallest groups, then come the Iban (av. 1.590 m., med. 1.585 m.), the Kayan and Punan medians come about half-way between the tallest Klemantans (Long Pokun, med. 1.590 m.) and the shortest (Lerong, med. 1.520 m). The above figures refer to men only, the women are markedly shorter.

Kohlbrugge gives the following information with regard to body measurements: the Kayan women are 14 cm. shorter than the men, usually the difference is 10 — 12 cm. The span is greater than the stature, the proportion is 105.2 : 100 in Kayans, 103.4 : 100 in Ulu Ayars and 106.5 : 100 in Punans and Tenggerese. In youths it is rather higher than in men. The difference between Tenggerese and Ulu Ayars is due to the latter having shorter arms, especially the upper arms, and the chest of the Bornean peoples is 2 cm. narrower. Other Indonesian peoples have a longer upper arm than the Ulu Ayars, who also have the tibia shorter in proportion to the femur. Kayan and Ulu Ayar men have a comparatively shorter femur than the Punan. The latter thus resemble the Tenggerese, the others have the same relative length as many other peoples of the Archipelago; there is no difference between the Malays and Indonesians in this respect. The Kayan women have relatively a much longer femur than the men. The shorter tibia makes the whole leg of the Bornean peoples shorter than in others — except that the Punans make it up with a longer femur. Women and young people have longer legs than men. The Punans have the fattest calves approximating to the Tenggerese, the other Bornean tribes are more like the Gorontalese. The chest girth of Ulu Ayars and Tenggerese is almost the same, despite the difference in the breadth of the chest, in which the Ulu Ayars resemble the inhabitants of Atchin measured by Lubbers. The proportion of the length of the foot to the stature is 16 : 100 in Kayans of both sexes, 15.4 : 100 in Ulu Ayars, and 15.2 in Punans. But the Kayan feet are shorter than those of the Gorontalese, who have the longest feet in the Archipelago. The other Bornean peoples are the same as Indonesians who resemble the Malays in this respect. The pelvic breadth of the Kayan men and women is equal (26 cm.), though men have the wider chest; the Punan pelvis is narrower than in the other two tribes; but in all three the pelvis is broader than in the Tenggerese.

We must now turn to the evidence of the crania, of which only a very brief account need be presented here. Owing to the fact that the people are head-hunters the skulls obtained by a traveller in any house are necessarily those of another community, group, or tribe than that to which the occupants of the house belong. Consequently it is necessary for a traveller to learn from the inhabitants the provenience of each cranium, and every one in the house knows it. It is useless for analytical purposes to deal with skulls of which the tribe is not accurately known; the information that a skull was obtained in a certain village or on a particular river is, as a rule, of very little value.

In Table C I give particulars of three head indices of 83 crania, of which the history is known in each case. Fifty-eight of these have been presented by Dr. Hose to the University of Cambridge. I have added to these 5 Murut, 1 Lepu Potong, 1 Kalabit, 1 Tring, 1 Bisaya, and 1 Orang Bukit, which Dr. Hose presented to the Royal College of Surgeons, London, 1 Ukit skull in the same museum, 3 Dusun in the British Museum, and 5 Murut, 3 Maloh, and 3 Kayan, which I measured in Sarawak. I have chosen the cranial length-breadth, length-height, and breadth-height indices, as these are more directly comparable with the corresponding cephalic indices of Table A. A detailed account of these crania must await a more suitable occasion.

The dolichocephalic crania are, as a rule, distinctly akrocephalic, that is, the length-height index is superior to the length-breadth index, but this is not the case with the brachycephals. I find the average length-height index in the living subject of a dozen inland tribes is 72.5 for 131 males and 78.2 for 40 females. That is, so far as our measurements go, the women are more akrocephalic than the men, which is unusual.

The conclusions to be drawn from a somatological investigation are necessarily limited. In my introductory remarks I stated that one could distinguish two main races among the principal groups of the peoples of Sarawak, a dolichocephalic and a brachycephalic, and that the former might be termed Indonesian and the latter Proto-Malay; further, no one group is probably of pure race, though it appears that some may be predominantly Indonesian and others Proto-Malay. I do not for a moment suggest that there was one migration of pure Indonesians and another of pure Proto-Malays which flooded Borneo and by various minglings produced the numerous tribes of that island, though I do suggest that there have been throughout the whole Archipelago various movements of peoples, some of which may have been relatively pure communities of these two races. There can be little doubt that we must look to the neighbouring regions of the mainland of Asia for their immediate point of departure southwards, for we now know that two similar races have inhabited this area from a remote antiquity. The light- (or light-brown) skinned dolichocephals of south-east Asia, assuming for the present that they are all of one race, have frequently been termed Caucasians — for the present I prefer to speak of them as Indonesians — and of these there are doubtless several strains. The light- (or light-brown) skinned brachycephals are usually grouped as Southern Mongols. In the south-east corner of Asia there are probably several strains of these

brachycephals which hitherto have been insufficiently studied. Even when an Indonesian element has been recognised in the population of the Archipelago there has been too persistent a practice of terming the brachycephalic element "Malay." The true Malay, Orang Malayu, is merely a specialised branch of a stock for which I prefer the non-committal name of Proto-Malay, even "Southern-Mongol" is preferable to "Malay." The Proto-Malay race has its roots on the mainland. It has yet to be shown how far the brachycephals of this region belong to what is here termed the Proto-Malay race or to what extent other, and doubtless allied, stocks are implicated. If, as is very probable, there have been migrations of differentiated peoples from the mainland into the islands, the Bornean peoples may be of more complex origin than the earlier generalisations might suggest. The dissecting out and the tracing of the migrations of these peoples is the work of ethnography, somatology can be of little assistance; all that I have done is to provide a certain amount of material for the use of students in the future. It must also be remembered that the immigrants from the mainland may have had at one time infusions of Negrito or Pre-Dravidian (Sakai) blood, not to speak of Tibetan, Chinese, or other mixtures. Similarly when the first migrations from the mainland took place the fairer-skinned immigrants probably found an indigenous population of Negritos, Pre-Dravidians, and possibly to some extent of Papuans in various parts of the Archipelago. We know that many of the islands, including Borneo, have been subject to direct migrations from India and China, and there has doubtless been a certain amount of movement of peoples from island to island. The racial history of this region is therefore extremely complex.

Dr. Hose has suggested the following classification[229] of the peoples of Sarawak (exclusive of the Malays), which I have followed in arranging the descriptions given below. For the sake of comparison I have recast the data published by Kohlbrugge concerning the three types studied by Nieuwenhuis; it is unfortunate that our several results cannot be more closely correlated.

#### A Classification of the Peoples of Sarawak

##### 1. Murut Group:

Murut, Pandaruan, Tagal, Dusun; Kalabit, Lepu Potong; Adang, Tring.

##### II. Klemantan Group:

###### 1. South-western Group:

Land Dayaks; [Certain tribes of Netherlands Borneo]; Maloh.

###### 2. Central Group:

A. Baram sub-group: Bisaya, Tabun, Orang Bukit, Kadayan, Pliet, Long Pata, Long Akar. B. Barawan sub-group: Murik, Long Julan, Long Ulai, Batu Blah, Long Kiput, Lelak, Barawan, Sakapan, Kajaman. C. Bakatan sub-group: Seping, Tanjong, Kanawit, Bakatan, Lugat.

###### 3. Sebop Group:

Malang, Tabalo, Long Pokun, Sebop, Lerong; Milanau (including Narom and Miri).

##### III. Punan Group:

Punan, Ukit, Siduan, Sigalang.

##### IV. Kenyah Group:

Madang, Long Dallo, Apoh, Long Sinong, Long Lika Bulu, Long Tikan.

V. Kayan Group. VI. Iban Group: Iban (Sea Dayaks) and Sibuyau.

#### Descriptions of Peoples

##### General Remarks on the Methods of Taking Observations

The physical characters and measurements of each individual were noted on a separate card, and the bulk of them have been embodied in the following synopses. As my object has been to give a general impression of each group, I have not burdened the descriptions with superfluous scattered observations. The original records are available in Cambridge for any desirous of consulting them. The statistics given refer to the several recorded

observations; where these fall short of the total number it may be taken for granted that as a rule the remainder did not depart markedly from the normal standard of the group in question — the presence of salient characters would be noted, not their absence.

In Table A certain measurements and indices are given of the more important groups in order to facilitate comparisons. Very small groups and half-breeds have been omitted, the object being to summarise the characters of the adults of the larger groups. The median in most cases is practically identical with the average, but where a difference occurs, the median more nearly represents the central type. The indices are based on a calculation to two decimal places; where the second decimal place is under five it is left out of account, and where five or over the first decimal place is augmented by one. This table should be compared with Table C.

In the other tables all the measurements and indices are given.

HEAD: LENGTH, from glabella to most prominent point of occiput; BREADTH, maximum at right angles to above; BI-AURIC BREADTH, from base of the tragus, pressing firmly; CIRCUMFERENCE, greatest circumference immediately above the glabella; AURICULAR VERTICAL ARC, from base of tragus over the vertex; AURICULAR RADII taken with a Cunningham's radiometer from the ear-hole. FACE: TOTAL LENGTH, from nasion to chin; UPPER LENGTH, from nasion to alveolus; BI-ZYGOMATIC BREADTH, from greatest prominence of cheek arches, pressing firmly; INTER-OCULAR WIDTH, between inner angles of the eyes; BI-GONIAL BREADTH, from the angle of the lower jaw, pressing firmly. NOSE: LENGTH, from nasion to angle with lip; BREADTH, between outer curvature of alae, without pressure; BI-MALAR BREADTH, from the outer upper corner of the margin of the orbit, pressing firmly (this was usually marked with a soft pencil); NASO-MALAR LINE, between these points over the bridge of the nose.

The term DOLICHOCEPHALIC is used to designate a cephalic index of 77.9 and under, and BRACHYCEPHALIC one of 78 and over. Heads with a length-height index of 66.9 and under are PLATYCEPHALIC, those of 67 — 69.9 are MESOCEPHALIC, and those of 70 and over are HYPsicEPHALIC. The breadth-height limits are 82.9, 83 — 84.9, and 85. The term CHAMAEPROSOPIC is used where the total facial index is 89.9 and under, and LEPTOPROSOPIC where it is 90 and over, the corresponding limit for the upper facial index is —49.9 and 50+. Owing to the character of the nose it was not easy in most cases to ascertain the exact upper limit of the length, and it is probably owing to this that the indices show such marked platyrhiny. Unfortunately these indices cannot be compared with those obtained by Nieuwenhuis, as he measured to the tip of the nose and not to its angle with the lip as we did. The term LEPTORHINE is used for noses with an index of 69.9 and under, MESORHINE for 70 — 84.9, PLATYRHINE for 85 — 99.9, and HYPER-PLATYRHINE for 100 and over. The profiles of the nose were compared with the figures in NOTES AND QUERIES (1892). In speaking of the EYE, by fold is meant the Mongolian fold which covers the caruncle. All the irises have a brown colour, being either light, medium, or dark. The observations on the EARS were made by means of MS. notes and diagrams drawn up for me by Prof. A. Keith. He recommended that persons under fifteen years of age or over sixty should not be noted, and that as there is a very marked sexual difference, observations on men and women should be kept quite separate. Variations in every race are, within certain limits, so numerous that he suggested that at least a hundred of each sex should be observed; although the numbers examined of the several tribes is usually very small, their total number will probably be found sufficient to give a fair idea of the more common types of ears. The TYPES of ears suggested by Dr. Keith are (1) "European": this applies only to the general shape; the folding, etc., varies enormously. (2) "Negroid": this resembles the "Orang type" but differs in being two-thirds of a circle; that is to say, the Negroid ear has a much greater breadth relative to its height than the ears of Europeans. (3) "Orang": this is the smallest and most degenerate form of ear, seen in its most typical form in the orang utan; it is the common female type. (4) "Chimpanzee": this is the largest and most primitive form of ear, and is found in its typical condition in the chimpanzee; it is commonly, but not always, set at a considerable angle to the head. ANGLE: The ear may be appressed (0), or it may stand out from the head at an angle of less than 30[degree] (1), between 30[degree] and 60[degree] (2), or over 60[degree] (3). LOBULE: This is never totally absent, but when it is 3 mm. or less from the middle of the curved base of the anti-tragus it may be called approximately so (0), when 3 — 10 mm. it is small (1), 10 — 15 mm. medium (2), over 15 mm. long (3). The lobule may be free or adhere partially or totally to the side of the face. DESCENDING HELIX: The degree of folding varies; there may be none (0), under 2 mm. (1), between 2 and 4 mm. (2), between 4 and 6 mm. (3). DARWIN'S POINT: It may be absent (0), or present as a distinct tip (1), as an infolded tip (2), as

an inrolled knob (3), or as a slight thickening of the infolded part of the helix (4); the position is constant in the upper posterior segment. TRAGUS: This may be absent (0), otherwise it varies in size measured from base to apex, under 3 mm. (1), between 3 and 5 mm. (2), or 5 to 7 mm. (3). Sometimes it has two apices.

ANTI-TRAGUS: This also may be absent (0), or if present the size from base to apex measures as in the tragus under 3 mm. (1), between 3 and 5 mm. (2), or 5 — 7 mm. (3). ANTI-HELIX: It is bent into an angle slightly or not at all (0), the angle does not reach the level of the helix (1), the angle is a little within or a little beyond the level of the helix (2), it is very prominent, distinctly beyond the level of the helix (3). Its prominence is a human feature.

As regards the HAIR, in all cases where there were a number of observations one or two of the oldest men had grizzled or even grey hair. The hair of the head is usually worn long and often attains a length of about two feet, but it is sometimes cut shorter and is occasionally very short. It is usually fairly abundant, but in all groups a few persons have scanty hair. The hair of the face is in all groups either absent or very scanty; the same applies to the body hair. The only scale of SKIN colours we had was that given in the NOTES AND QUERIES ON ANTHROPOLOGY (2nd ed., 1892), but as this was obviously inadequate for the purpose, Dr. Hose prepared a scale for our use in the field, the shades of which have subsequently been as far as possible equated with those of Prof. von Luschan's Hautfarben-Tafel (Puhl and Wagner, Rixdorf); it is these numbers which appear in brackets in the following descriptions, and I have also attempted to describe them in English; the term cinamon is based on the colour of the stick cinnamon of commerce. The colours were usually matched from the inner aspect of the upper arm so as to avoid the darkening caused by the burning of the sun. Besides the information recorded on the cards, a number of additional data on skin colour collected by Dr. Hose are included in the synopses. As regards STATURE the subject is described as SHORT when he measures less than 1.625 m. (5 ft. 4 in.), MEDIUM 1.625 — 1.724 m. (5 ft. 4 in. to 5 ft. 8 in.), and TALL 1.725 m. and over; the subject had his eyes looking towards the horizon.

With the exception of the observations by Mr. R. Shelford, mainly on the Land Dayaks and Iban, which are duly noted, all the data on the living were collected by Dr. W. McDougall and myself, either separately or conjointly, and I have to thank him for permitting me to work up the results. Our thanks are due to Dr. Hose, at whose invitation we went to Sarawak, and without whose zeal, knowledge of the country, and wonderful influence over the natives this work could not have been accomplished. Mr. S. H. Ray also assisted us as amanuensis. Most of the figures were tabulated for me by Miss Barbara Friere-Marreco and the remainder by Miss Lilian Whitehouse, who also has greatly assisted me in drawing up this memoir.

#### I. Murut Group

Seven KALABIT men and 3 women and 4 MURUT men were measured. No descriptive details of the Muruts are available.

HEAD-FORM: The cephalic indices show 7 to be dolichocephalic and 7 brachycephalic; the 3 women are slightly more dolichocephalic than the men, for whom the median is 78.5. One Kalabit is platycephalic, 1 mesocephalic, and 8 hypsicephalic as regards length-height, and all are hypsicephalic as regards breadth-height. Four Kalabits were noted as having oval heads, in 1 the occiput was prominent, 1 ovoid, and 1 woman ellipsoidal.

FACE: Five Kalabits have pentagonal faces, being rather broad in 3, 2 were long and rather narrow, the jaws are narrow in 2. They show a marked tendency to prognathism, especially dental prognathism. The Kalabits are chamaeprosopic as regards both the total facial and the upper facial indices, with one exception in both respects. The forehead has a slight tendency to be narrow and high. The cheek-bones are moderately prominent in 5 men and 1 woman and not prominent in 2 men and 1 woman. The lips are moderately full. The chin is rather small, and retreating in 3. NOSE: One Murut is leptorhine, 2 Kalabit men are mesorhine, 6 are platyrhine, and 5 hyper-platyrhine. The root is high in 4 Kalabit men, narrow in 3, broad in 4 and 1 woman, and flat in 3 and 1 woman; the base is reflected in 3 of each sex, and straight in 2 men; the alae are small in 4 men and 3 women, moderate in 3 men, and round in 1 of each sex; the nostrils are rounded in 5 men and 3 women, and wide in 2 men. EYES: The aperture is narrow in 1 man, moderately open in 5 men and 1 woman, wide in 1 man and 2 women; it is straight with no fold in 5 men, straight with slight fold in 1 man, more or less oblique with slight fold in 1 man and 2 women, in 1 woman it is straight and the fold is more developed in the right eye than in the left; the colour is medium in 1 man, dark brown in 5 men and 3 women. EARS: Type European in 3 of each sex, Negroid in 1 man, and intermediate in 2 men; angle prominent in 5 men and 3 women, slightly prominent in 2

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men; lobule always distended, in 2 men it is adherent; descending helix infolded under 2 mm. in all but 1 man in whom it is under 4 mm.; Darwin's point absent in 3 men and 1 woman, doubtful in 2 men, infolded in 1 man, inrolled in 2 women; tragus under 3 mm. in 2 men, 3 — 5 mm. in the rest; anti-tragus absent in 4 men, and 1 woman, under 3 mm. in 3 men and 2 women; anti-helix below level of helix in 2 of each sex, about at the same level in 5 men and 1 woman.

**HAIR:** It is straight to wavy in 1 of each sex, wavy in 3 men and 1 woman, wavy-curly in 1 man. The colour is rusty black in 7 men and 3 women. It is moderately abundant and long.

**SKIN:** Four are lightest cinamon (12), 1 light cinamon (14), 1 cinamon (6), 2 pale fawn (pale 17), 2 dull fawn (17).

**Stature:** All but 1 Murut man are of short stature, 1 Kalabit man being only 1.485 m. (4 ft. 10 1/2 in.), the 3 women are still shorter, 1 being 1.410 m. (4 ft. 7 1/2 in.), the median for the Kalabits is 1.565 (5 ft. 1 1/2 in.).

### II. Klemantan Group

#### 1. South-western Group

(A) Forty-two LAND DAYAK men were measured by Mr. Shelford.

**HEAD-FORM:** The cephalic indices range fairly evenly from 73.5 to 86.9, 19 men being dolichocephalic; the median is 78.4.

**FACE:** One is noted as very broad and 2 as prognathous. All but 1 are chamaeprosopic as regards the total facial index and all but 6 as regards the upper facial. **NOSE:** Nineteen are mesorhine, 17 platyrrhine, and 6 hyper-platyrrhine; 1 is noted as aquiline, 3 as straight but flat, and 2 have a low bridge; 2 have broad alae, 1 having a very concave nose, broader than long with an index of 116.2, and wide nostrils, it is evidently abnormal. **Byes:** A fold is mentioned in 18, of which 3 are slight and 2 pronounced, its absence is noted in 3; 5 have medium brown irises.

**HAIR:** It is noted as straight in 6 and wavy in 2; it is black in 8, and 24 have abundant hair; the hair of the face is absent in 7 and sparse in 8, 1 had a stubbly beard.

**SKIN:** The colour of the skin is darker than that of other inland tribes, 19 being of a very dark warm cinamon (25) and 4 cinamon (6). It is noted in 1 as much darker when uncovered.

**STATURE:** None are tall, 7 are medium, the rest short, 4 being under 1.5 m. (4 ft. 11 in.), the median is 1.577 m. (5 ft. 2 in.).

[Thirty-one male and 4 female Ulu Ayar Dayaks were measured by Nieuwenhuis, of these 5 were boys under 17, and all 4 females were girls of 17 and under. See vol. ii., p. 315, note 1.

**HEAD-FORM:** The cephalic indices range fairly evenly between 71 and 81.4, all but 5 are dolichocephalic, the median being 74.7.

**FACE:** It is usually of medium breadth; 2 (I.E. 6 per cent) have broad faces. The bi-zygomatic breadth ranges from 125 to 145 mm., the median being 136 mm. **NOSE:** The breadth-measurements range from 36 to 46 mm., the length-measurements being taken from root to tip are therefore not comparable. Eighteen males and 3 females are noted as having concave noses, 13 and 1 as having broad flat noses, none as straight or narrow, I.E. 60 per cent of the Ulu Ayars have concave ("depressed," "sunken," or "hollow") noses. **EYES:** The Mongolian fold does not occur. The colour is dark.

**HAIR:** All had straight hair except 1 man; it is generally rather scanty. The colour is black.

**SKIN:** The colour is noted as black or blue-black in 10, brown and yellow in 5, light brown in 20.

**STATURE:** None are tall, 3 are medium, and the rest short, 2 being under 1.5 m. (4 ft. 11 in.); the median is 1.551 (5 ft. 1 in.).]

(B) Seven MALOH men were measured by us.

**HEAD-FORM:** The cephalic index is essentially dolichocephalic, 3 being low brachycephals, the median 76.8. Two are mesocephalic in the length-height index and none in the breadth-height, all the remainder are hypsicephalic in both respects; 4 are pyriform, 2 oval, and 1 ellipsoidal in shape.

**FACE:** Two are pentagonal, 2 rather broad, and 2 long; alveolar prognathism is noted in 3, 1 of which has also general prognathism. Two only are leptoprosopic in their total and upper facial indices. The forehead is somewhat narrow and high, the cheek-bones more or less prominent, the lips are usually moderately full, and the chin fairly well developed. **NOSE:** One is mesorhine, 4 platyrrhine, and 2 hyper-platyrrhine; the profile is equally divided between straight and concave; the base is reflected in 5, deflected in 2; the alae are rather small and the nostrils



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wide and rounded. EARS: Type European in 5 (1 doubtful), Negroid in 2; angle prominent in 5, slightly prominent in 2; lobule distended in all; descending helix infolded under 2 mm. in 5, 2 — 4 mm. in 2; Darwin's point absent in 5, inrolled in 2 (1 doubtful); tragus 3 — 5 mm. in 5 (2 doubtful), rather less in 2; anti-tragus absent in 1, doubtful in 1, under 3 mm. in 5 anti-helix below level of helix in 4, about at the same level in 3.

HAIR: The hair is distinctly wavy and long; it is rusty black in 5 and black in 2. There is a moderate amount on the face and none on the body.

SKIN: SIX are dull fawn (17).

STATURE: ALL are short, 1 being 1.47 m. (4 ft. 9 3/4 in.); the median is 1.585 m. (5 ft. 2 1/2 in.).

### 2. Central Group

BARAWAN SUB-GROUP — This consists of 1 Murik man, 1 Long Ulai man and 1 woman, 8 Long Kiput men, 3 Lelak men, 12 Barawan men and 5 women, 2 Sakapan men, 1 Kajaman, and 4 mixed breeds (I.E. mixed with other Klemantan blood).

HEAD-FORM: Of the longer series the Barawans are the more dolichocephalic, 6 men and 3 women have an index below 78, 1 Long Kiput man and only 4 others being dolichocephalic; the median of the whole series, excluding women, is 79. Most of the men and all the women are hypsicephalic; but 2 Barawans are platycephalic, and 1 Barawan and 2 mixed breeds are mesocephalic in length-height; 1 Long Kiput is platycephalic in length-height and breadth-height, 2 are mesocephalic in both respects, and 1 in length-height only; 1 Lelak is platycephalic in length-height and mesocephalic in breadth-height. The shape is noted as oval in 5 men and 3 women, ovoid in 1 of each sex, round in 3 men.

FACE: Nine men and 3 women have a pentagonal face; it is oval in 1 man and 2 women, rather long in 5 men, square in 2 men, broad in 1 of each sex. All are chamaeprosopic in both respects except 1 Barawan man as regards total facial index and 2 in the upper. The forehead is rounded or prominent in 8 men and 6 women, upright in 4 men and 1 woman, more or less sloping in 4 men, broad and low in 5 men, narrow in 4 men. The cheek-bones are large in 6 men and 1 woman, more or less prominent in 10 men and 3 women, moderate in 11 men and 2 women. The lips vary in thickness, 10 being thin and 7 more or less thick. The chin is fairly well developed except in 6 men. NOSE: One Lelak is leptorhine, 2 Long Kiputs) 3 Barawan men and 2 women and 2 Barawan mixed breeds are mesorhine; 5 Long Kiputs, 2 Lelaks, 6 Barawan men and 1 woman and 1 mixed breed, 1 Long Ulai man and woman and 2 Sakapans are platyrhine; 1 Long Kiput, 3 Barawan men and 2 women, 1 Murik and 1 Kajaman are hyper-platyrhine. The profile is straight in 10 men and 1 woman, more or less concave in 13 men and 5 women, slightly aquiline in 4 men; blunt tips were noted in 2 cases. The root is more or less depressed in 12 men and 4 women, not depressed in 7 men, broad and high in 3, high in 3, narrow in 3. The base is reflected or slightly so in 16 men and 4 women, straight in 9 and 1, slightly deflected in 1 woman; the alae are small in 3 men and 4 women, moderate in 4 men, and wide in 5; the nostrils are round in 7 men and 5 women, oval in 10 and 1, and transversely oval in 2 men. EYES: Aperture is moderate in 11 men and 2 women, small in 10 men, large in 1 man. It is straight with no fold in 3 men and 2 women, straight with a slight fold in 1 woman, slightly oblique with no fold in 8 men and 1 woman, slightly oblique with slight fold in 8 men and 2 women, in 1 Barawan man it is slightly oblique with a very marked fold, 11 Barawans have more or less oblique eyes of which 7 have a fold, 4 are straight, 1 of which has a slight fold. Four men have light brown irises, 2 of each sex dark brown, the remainder are medium. EARS: Type European in 5 Long Kiputs, 2 Lelaks, 8 Barawans and 2 mixed breeds, 1 Kajaman; Negroid in 1 Barawan mixed breed; orang in 2 Barawans. Angle slightly prominent in 1 Long Kiput, 2 mixed breeds and 1 Kajaman, rather more so in 1 Long Kiput, prominent in 1 Lelak, 5 Barawans. Lobule distended throughout, perforated in 2 Barawans, adherent in 1 mixed breed. Descending helix absent in 1 Long Kiput, infolded less than 2 mm. in 4 Long Kiputs, 1 Lelak, 11 Barawans and 2 mixed breeds, 1 Kajaman; 2 — 4 mm. in 1 Lelak, 1 Barawan mixed breed. Darwin's point absent in all except 1 Barawan and 1 mixed breed where it is an infolded tip. Tragus under 3 mm. in 4 Long Kiputs, 1 Lelak, 1 Barawan and 1 mixed breed, slightly more in 1 Lelak, 1 Barawan; 3 — 5 mm. in 1 Long Kiput, 9 Barawans and 2 mixed breeds, 1 Kajaman. Anti-tragus absent in 1 Long Kiput, 3 Barawans; under 3 mm. in 3 Long Kiputs, 2 Lelaks, 7 Barawans and 3 mixed breeds, 1 Kajaman; 3 — 5 mm. in 1 Long Kiput, 1 Barawan. Anti-helix below level of helix in 2 Long Kiputs, 5 Barawans and 1 mixed breed; about at same level in 3 Long Kiputs, 2 Lelak, 6 Barawans and 2 mixed breeds, 1 Kajaman. The 5 Barawan women have ears of European type; angle slightly prominent in 2, prominent in 3; lobule distended in all; descending helix infolded less than 2 mm. in 4, 2 — 4 mm. in 1; Darwin's point absent in all;

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tragus 3 — 5 mm. in all; anti-tragus absent in 2, under 3 mm. in 3; anti-helix below level of helix in 2, about at same level in 3.

**HAIR:** Seven men and 2 women have straight hair, 17 and 3 wavy, and 2 men curly hair; the colour. is rusty black in 13 men and 3 women, black in 12 and 3, brown in 1 man. It is generally abundant and long.

**SKIN:** Three are cinamon (6), 6 light cinamon (14), 15 lighter still (12), 3 dull fawn (17), 3 pale fawn (pale 17), 4 pale pinkish buff (11).

**STATURE:** Four men are of medium stature, 30 are short, of whom 2 men and all 6 women are below 1.5 m., 1 Barawan woman being only 1.395 m. (4 ft. 7 in.); the Barawans as a whole are shorter than the others. The median for the whole series of men is 1.54 m. (5 ft. 1/2 in.).

### 3. Sebop Group

Sixteen MALANG men and 4 women were measured.

**HEAD-FORM:** The indices show 10 men and 3 women to be dolichocephalic, 6 men and 1 woman brachycephalic; the median is 76.9 for the men. All are hypsicephalic, except 2 men in respect to length-height. The shape is described as ovoid in 7 men, oval in 2, round oval in 1 of each sex, and ellipsoidal in 4 men.

**FACE:** IT is pentagonal in 10 men and 3 women, ovoid in 1 woman, and lozenge-shaped in 1 man; 6 men have long faces and 2 broad. Alveolar prognathism is noted in 3 men, and superciliary ridges in 3. All are chamaeprosopic except 1 of each sex in regard to the upper facial index. The forehead is full in 9 men and 1 woman, broad in 3 men and 1 woman, narrow in 4 and 1, low in 4 and 2, high in 4. The cheek-bones are more or less prominent in 12 men and 2 women, moderate in 2 men, and not prominent in 2 of each sex. The lips are moderately thin. The chin is rather small in 6 men; it is fairly well developed in 7 men and 4 women. **NOSE:** 2 men and 1 woman are mesorhine, the rest platyrhine, 2 men being hyper-platyrhine. The profile is straight in 8 men and 1 woman, more or less concave in 4 men and 3 women, slightly aquiline in 2 men, high-bridged in 1, and slightly sinuous in 1; blunt tips are noted in 4 men and 3 women. The root is moderately high in 10 men and 1 woman, low in 6 and 3; it is narrow in 3 men and broad in 9 men and 3 women. The base is reflected in 12 men and 4 women, straight in 3 men; the alae are small in 11 men and 4 women, and moderate in the remaining men; the nostrils are round in 9 men and 1 woman, wide in 4 and 1, long oval in 2 men and round oval in 1, narrow and elongated in 1 woman, large in 1 man, they are nearly or quite horizontal in 3 men. **EYES:** The aperture is small or narrow in 7 men and 2 women, moderately open in 5 men and 1 woman; it is straight with no fold in 8 men and 1 woman, straight with a slight fold in 4 men, slightly oblique with no fold in 2 men and 1 woman, slightly oblique with fold in 2 of each sex, the fold being slight in 1 man. The colour of the iris is dark brown in 8 men and 4 women, medium in 7 men and light in 1. **EARS:** Type European in 13 men and 4 women (1 doubtful), approximately Negroid in 2 men, chimpanzee in 1 man; angle prominent in 11 men and 3 women, rather less in 3 men, slightly prominent in 2 men; lobule distended in all but 1 man; descending helix absent in 2 women, infolded less than 2 mm. in 12 men and 1 woman (doubtful), 2 — 4 mm. in 4 men and 1 woman; Darwin's point absent in 15 men and 3 women, doubtful in 1 man, infolded in 1 woman (?); tragus under 3 mm. in 2 men, 3 — 5 mm. in 14 men and 4 women (1 doubtful), double in 3 men and 1 woman of these latter; anti-tragus absent in 6 men and 1 woman, trace in 2 men, under 3 mm. in 7 men and 2 women (1 doubtful), 3 — 5 mm. in 1 of each sex; anti-helix below level of helix in 11 men and 3 women (1 doubtful), about at the same level in 5 men and 1 woman.

**HAIR:** It is wavy in character; the colour is rusty black in 14 men and 4 women, black in 2 men. It is usually long and abundant on the head; 4 men have slight moustaches.

**SKIN:** Fourteen are lightest cinamon (12), 2 light cinamon (14), 9 pale fawn (pale 17), 2 light brown (near 17), 5 pale pinkish buff (11).

**STATURE:** One man is tall, the rest are short, 2 men and all the women being under 1.5 m.; the median for the men is 1.535 m. (5 ft. 1/2 in.).

Eight LONG POKUN men and 10 women were measured.

**HEAD-FORM:** The cephalic indices show 5 men and 4 women to be dolichocephalic, 3 men and 6 women brachycephalic; the median for the men is 76.9, for the women 79.4. One man is platycephalic, 3 men and 1 woman mesocephalic and the rest hypsicephalic as regards length-height, all are hypsicephalic as regards breadth-height, in each respect the women being markedly more hypsicephalic than the men. The shape is noted as oval in 1 man and 9 women, round oval in 1 of each sex, ellipsoidal in 1 man and pyriform in 4 men.

## Pagan Tribes of Borneo, V1

**FACE:** In 5 men and 6 women it is more or less pentagonal, in 1 man and 2 women lozenge-shaped. All are markedly chamaeprosopic both in total facial and upper facial indices. The forehead is narrow in 3 men and 1 woman, broad in 2 and 1, small in 2 women, high or moderate in 2 men and 6 women, fairly prominent in 1 and 2, low in 3 men. The cheek-bones are moderately prominent in 8 of each sex, very prominent in 1 woman, and not prominent in 1 woman. The lips are moderately thin in most cases, but are rather thick in 2 men and 1 woman. The chin is small in 3 men and 6 women (noted as not retreating in 2 women), but is fairly well formed. **NOSE:** Four men and 5 women are mesorhine, the rest platyrrhine, 1 of each sex having an index of 100. The profile is straight in 7 men and 4 women (the tip being blunt in 4 men and 2 women, and depressed in 3 men), concave in 4 women, "Chinese" in 1 man and 2 women. The root is broad in 4 men and 9 women (flat in 4 of the women), low in 3 men and 2 women, moderately high in 4 of each sex, moderately narrow in 2 men; the base is more or less reflected in 8 men and 6 women, very much reflected in 1 woman, and nearly straight in 3; the alae are small in 6 men and 8 women, moderate in 1 of each sex and wide in 1 of each sex; the nostrils are round in 3 men and 7 women, more or less widely open in 6 men and 5 women and small in 3 women. **EYES:** The aperture is moderately open in 6 men and 7 women, wide in 1 of each sex and rather narrow in 1 man and 2 women; it is straight with no fold in 4 men and 6 women, straight with fold more or less developed in 2 men and 1 woman, slightly oblique with no fold in 2 men, slightly oblique with slight fold in 2 women, and oblique with a trace of fold in 1 woman. The colour is light brown in 1 man, medium in 6 men and 7 women, dark in 1 and 3. **EAR:** Type European in 7 men (2 doubtful) and 3 women, intermediate between European and Negroid in 1 man; angle prominent in 6 men and 1 woman; lobule distended, right adherent in 1 woman; descending helix infolded less than 2 mm. in 7 men and 1 woman, 2 — 4 mm. in 1 of each sex; Darwin's point absent in 2 men and 1 woman, doubtful in 2 men, distinct tip in one man; tragus under 3 mm. in 3 of each sex, being double in 1 man and 3 women, slightly larger in 2 men, being double in 1, 3 — 5 mm. in 3 men and 7 women, being double in 4 women; anti-tragus absent in 2 men and 5 women (1 doubtful), trace in 2 men and 1 woman, under 3 mm. in 4 men and 1 woman; anti-helix below level of helix in 6 men and 1 woman, about at the same level in 2 men (1 doubtful) and 1 woman.

**HAIR:** It is straight in 1 man, straight to wavy in 1 man and 5 women, wavy in 5 and 3, wavy to curly in 1 man. The colour is rusty black in 7 of each sex and dark brown in 3 women. It is long and fairly abundant on the head; 2 men have beards, one only on the right side.

**SKIN:** Seven are lightest cinamon (12), 1 with a trace of green, 5 are dull fawn (17), 2 pale fawn (pale 17), 3 pale pinkish buff (11).

**STATURE:** TWO men are of medium height, the rest short, the median being 1.59 m. (5 ft. 21 in.); only 2 women are over 1.5 m. and 2 are under 1.4 m. (4 ft. 7 in.), the median being 1.47 m. (4 ft. 10 in.).

Five SEBOP men were measured.

**HEAD-FORM:** All but 1 are dolichocephalic, the median, being 75.3) 1 is platycephalic in regard to length-height, and 1 mesocephalic, the rest are hypsicephalic in both respects. The shape is pyriform in 2, oval to roundish in the remainder.

**FACE:** It is pentagonal in 4, and narrow with rather prominent brow-ridge in 1. All are chamaeprosopic in both respects. The forehead is full in 2 and low in 2. The cheek-bones are more or less prominent in 4, 1 is not prominent. The lips are thin in 3 and moderate in 2. The chin is fairly well developed. **NOSE:** Three are mesorhine, 1 platyrrhine, and 1 hyper-platyrrhine. The profile is concave in 2, straight in 1, and intermediate in 2; a blunt tip is noted in 1. The root is narrow and moderately high in 2, moderately broad in 2, moderately high in 1, and 2 are fairly broad and flat. The base is reflected in 3 and straight in 2; the alae are small in 3, moderately large and rounded in 1, and wide and horizontal in 1. **EYES:** The aperture is fairly open in 4, rather narrow in 1; it is straight with no fold in 3, and slightly oblique with a slight fold in 2. The colour is medium brown. **EARS:** Type European in 2, European to Negroid in 1; angle prominent in 2; lobule distended in 1, trace in 1, 3 — 10 mm. in 2, 10 — 15 mm. in 1; descending helix infolded less than 2 mm. in 2, 2 — 4 mm. in 3; Darwin's point absent in 2; tragus under 3 mm. in 1, rather larger in 1, 3 — 5 mm. in 3; anti-tragus under 3 mm. in 4, 3 — 5 mm. in 1; anti-helix below level of helix in 2, about at the same level in 3.

**HAIR:** It is wavy in 3, straight to wavy in 1, curly in 1; the colour is rusty black in 4, dark brown in 1. It is fairly long and moderately abundant on the head; 1 man has a small moustache at angles of mouth, and 1 has a fairly good moustache and beard.

## Pagan Tribes of Borneo, V1

SKIN: Two are lightest cinamon (12), 1 light brown (near 17).

STATURE: All are short, 1 being under 1.5 m.; the median is 1.54 m. (5 ft. 1/2 in.).

Ten LERONG men and 5 women were measured.

HEAD-FORM: The cephalic indices show 4 men and 1 woman to be dolichocephalic, 6 men and 4 women brachycephalic, the median being 78.5 for the men and 81 for the women. Three men are mesocephalic as regards length-height, otherwise both sexes are hypsicephalic both in length-height and breadth-height, the women being more so than the men. The shape is noted as ovoid in 5 men, pyriform in 3 men, oval in 3 of each sex, and round oval in 2 women (1 with vertical occiput).

FACE: It is more or less pentagonal in 8 men and 1 woman, oval or ovoid in 4 women, broad in 1 woman, and long in 2 men; alveolar prognathism is noted in 1 of each sex and sunken temples and cheeks in 1 man. All are chamaeprosopic as regards both total facial and upper facial indices, one man only being an exception in both respects. The forehead is good in 3 of each sex, fair in 3 men, rather narrow in 2 men and 1 woman. The cheek-bones are prominent in 8 men and 2 women, not prominent in 2 and 3. The lips are moderately thin in 4, men but tend to be thick in 2 men and 4 women. The chin is usually well developed, but is small in 2 women. NOSE: Three men and 1 woman are mesorhine, the rest platyrhine, 1 woman being hyper-platyrhine. The profile is straight in 4 men and 1 woman, straight to slightly sinuous in two men, "Chinese" in 1 woman, concave in 4 men and 3 women; blunt tips are noted in 6 cases and depressed tips in 3; the root is moderately high in 7 men, narrow in 2, more or less broad in 4 men and 1 woman, rather low in 2 and 1, broad and flat in 4 women. The base is more or less reflected in 6 men and 4 women, straight in 4 men; the alae are small in 4 of each sex, moderate in 4 men, wide in 1 of each sex; the nostrils are rounded in 5 of each sex, and more or less widely open in 6 men, distended in 1 man. EYES: The aperture is moderately wide in 9 men and 4 women, and rather narrow in 1 woman; it is straight with no fold in 4 men and 1 woman, straight with slight fold in 2 women (in one case trace of fold in right eye only), slightly oblique with trace of fold in 2 men and 1 woman and with fairly developed fold in 1 woman, slightly oblique with no fold in 1 of each sex, quite oblique with slight fold in 1 man. The colour is medium brown in 8 men and 5 women and dark brown in 1 man. EARS: Type European in 9 men and 4 women (3 doubtful), Negroid in one man; angle prominent in 8 men (1 doubtful), slightly prominent in 1 man; lobule distended in all but 1 man in whom it is medium; descending helix infolded less than 2 mm. in 9 men and 1 woman (doubtful), 2 — 4 mm. in 1 man; Darwin's point absent in 6 men, inrolled knob in 1 man; tragus under 3 mm. in 4 men, being double in 3, slightly larger in 1 of each sex being double in both, 3 — 5 mm. in 6 men and 4 women being double in 1 man; anti-tragus absent in 3 men and 4 women, under 3 mm. in 8 men; anti-helix below level of helix in 5 men, about at the same level in 5 men and 1 woman.

HAIR: It is straight in 2 women, straight to wavy in 6 men and 3 women, wavy in 3 men. The colour is rusty black in 7 men and 3 women, light rusty black in 1 man, dark brown in 1 man and 2 women. It is nearly always abundant on the head, and is rather long, especially in the women.

SKIN: Eight are lightest cinamon (12), 1 light cinamon (14), 2 cinamon (6), 4 pale fawn (pale 17).

Stature: One man is of medium height, the rest are short, 2 being under 1.5 m., the median is 1.52 (4 ft. 11 3/4 in.). Four women are under 1.5 m., one being only 1.39 m. (4 ft. 6 1/2 in.).

Seven MILANAU men, consisting of 6 Narom and 1 Miri, were measured.

HEAD-FORM: All are brachycephalic, but it should be remembered that deformation of the head is practised by these people (vol. i., p. 48), and it is probable that the cephalic index is very rarely normal, consequently the head indices may be neglected. Three are flat behind and broad in the parietal region, of whom 2 are narrow in front and 1 broad, 3 are more or less ovoid.

FACE: It is pentagonal in 4, the angle of the jaws is prominent in 1; the Miri man has an oval face pointed below, with small jaws and alveolar prognathism. All are chamaeprosopic in regard both to total facial and upper facial indices. The forehead is low and broad in 1, high and broad in 1, low in 1, high in 2, and rather sloping in 1. The cheek-bones are prominent in 3 and moderately large in 4. The lips are moderately thin as a rule, in 1 they are fairly large. The chin is rather small in 4, and fairly well formed in 3. NOSE: Four men are mesorhine and 3 platyrhine, the highest index being 89.1. The profile is straight in 4, with blunt tip in 2, slightly concave in 2, and sinuous with blunt tip in 1; the root is high in 1, narrow and moderately high in 2, broad and moderately high in 3; the base is straight in 5, reflected in 1, and slightly concave in 1; the alae are moderate in 3, and small in 1; the nostrils are rounded in 1, broad in 1, moderately oval in 1. EYES: The aperture is moderately wide; it is straight

with no fold in 1, slightly oblique with no fold in 3, more or less oblique with slight fold in 3. The colour of the iris is medium brown in 4 and light in 2. EARS: Type European in 2, European to Negroid in 1, European to chimpanzee in 1, chimpanzee in 1, orang in 1; angle prominent in 6, slightly prominent in 1; lobule absent in 1, trace in 3, being adherent in 1, small in 2, medium in 1; descending helix infolded less than 2 mm. in 6, 2 — 4 mm. in 1; Darwin's point absent in all; tragus under 3 mm. in 1, slightly larger in 15 3 — 5 mm. in 5, being double in 2; anti-tragus under 3 mm. in 5, 3 — 5 mm. in 2; anti-helix below level of helix in 3, slightly below in 1, about at the same level in 2, distinctly beyond in 1.

HAIR: One man had curly hair 1 wavy, 1 straight to wavy, and 1 straight, but the character was difficult to determine as in all cases but one the hair was cut, being more or less closely cropped in 2 men. The colour is noted as black in 6, and rusty black in 1, and as fairly abundant on the head in 3; several had hair on the face, 2 had small moustaches, 2 had moustaches and short beards, 1 had small beard and moustache and thick eyebrows.

SKIN: Three axe cinamon (6), 1 light cinamon (14), 1 lightest cinamon (12), and 1 pale fawn (pale 17).

STATURE: One is of medium height, the rest are short but none are under 1.5 m.; the median is 1.562 m. (5 ft. 1 1/2 in.).

### III. Punan Group

Eighteen PUNAN men and four women were measured by us and one man by Mr. Shelford.

HEAD-FORM: The cephalic indices show 3 men to be dolichocephalic, the rest of the men and all the women are brachycephalic, the median being 80.9 for the men and 81.2 for the women. Two men are platycephalic both in length-height and breadth-height, 1 is platycephalic in length-height but mesocephalic in breadth-height, 1 is platycephalic in length-height but hypsicephalic in breadth-height, 1 is mesocephalic in length-height but platycephalic in breadth-height, 1 of each sex is mesocephalic in both respects, 1 of each sex is mesocephalic in length-height but hypsicephalic in breadth-height, 1 woman is hypsicephalic in length-height and platycephalic in breadth-height, the rest are hypsicephalic in both respects. The shape is usually ovoid in the men, 2 are noted as pyriform; 3 women have round heads.

FACE: The shape varies; it is oval in 4 men and 2 women, but owing to the general moderate prominence of the cheek-bones and the smallness of the chin, it becomes pentagonal (3 men) or even lozenge-shaped or triangular (2 men); 1 woman has a broad face and 1 man a somewhat square, while 2 men have long faces. Alveolar prognathism is noted in 1 case and superciliary ridges in 2. All are chamaeprosopic except 2 men, 1 being leptoprosopic in regard to both total facial and upper facial indices, the other as to upper facial only. The forehead is upright in 3 of each sex, full in 5 men and 1 woman. The cheek-bones are prominent in 9 men, moderate in 6 men and 2 women, broad in 1 of each sex. The lips are moderately thin except in 2 men and 1 woman. The chin is usually fairly well formed; though small it is not retreating in 5 men. NOSE: Eight men are mesorhine, 7 men and 3 women platyrhine, 4 men and 1 woman hyper-platyrhine. The profile is straight in 10 men and 1 woman, slightly concave in 6 and 1; the root is more or less depressed in 9 men and 2 women, fairly high and narrow in 4 men; the base is slightly reflected in 9 men and 4 women, straight in 7 men, and slightly deflected in 2 men; the alae, are usually moderately developed, rather thin in 4; the nostrils are oval in 13 or rounded in 4. EYES: The aperture is moderate in 11 men and 1 woman, small in 5 and 2; it is straight with no fold in 5 men, slightly oblique with no fold in 3 men, slightly oblique with a slight fold in 6 men and 3 women and with a more developed fold in 1 woman, moderately oblique with moderate fold in 3 men and with slight fold in 1 man. The colour is light brown in 2 men, medium in 8, dark in 6 and 1 woman. EAR: Type European in 8, European to Negroid in 4; angle prominent in 6, more so in 2; lobule distended in 9, absent in 1, adherent in 2, being small in 1; descending helix absent in 3, infolded less than 2 mm. in 6, rather more in 1, 2 — 4 mm. in 2; Darwin's point a distinct tip in 2, doubtful in 1, absent in the rest; tragus under 3 mm. in 5, being double in 1, rather larger in 1, 3 — 5 mm. in 7, being double in 1; anti-tragus absent in 2, trace in 1, under 3 mm. in 10; anti-helix below level of helix in 5, about at the same level in 8.

HAIR: It is straight in 6 men and 3 women, straight to wavy in 2 men, wavy in 8 men and 1 woman, wavy to curly in 1 man. The colour is rusty black in 12 men and 1 woman, black in 5 men, and dark brown in 1 man. It is usually fairly long and abundant on the head, but in 6 men it is noted as thin; 7 have a slight amount of hair on the face and 1 a moderate amount on the legs.

SKIN: Fifteen are light cinamon (14), 15 lightest cinamon (12), 11 pale fawn (pale 17), and 6 dull fawn or light brown (17).

## Pagan Tribes of Borneo, V1

STATURE: Two are of medium height, the rest short, 4 men being under 1.5 m.; the median is 1.55 m. (5 ft. 1 in.).

Three UKIT men were measured by Mr. Shelford. They are more brachycephalic than the Punan, their median index being 83.3, but are slightly less chamaeprosopic, 2 being leptoprosopic in regard to the upper facial index. All 3 are mesorhine.

The Mongolian fold is very slight in 2. All have straight black hair. One is tall, measuring 1.735 m. (5 ft. 8 1/4 in.), the other 2 are short.

[Fourteen PUNAN men were measured by Nieuwenhuis.

HEAD-FORM: The cephalic indices range evenly between 77.5 and 86.1, the median being 81.3; all except 1 are brachycephalic.

FACE: It is broad in 5 and medium in the rest. The bi-zygomatic breadth ranges from 132 to 145 mm., which is rather narrower than the range obtained by us, 130 — 154 mm. NOSE: the breadth varies between 37 and 43 mm., whereas in the Punans measured by us the range was between 34 and 44 mm. The shape is noted as concave in 4, broad and flat in 10, I.E. 29 percent have "depressed," "sunken," or "hollow" noses. EYES: the Mongolian fold does not occur. The iris is dark.

HAIR: It is uniformly straight and tends to be scanty. The colour is black.

SKIN: The colour is light brown in 10, brown and yellow in 2, black or blue-black in 2.

STATURE: None are tall, 4 are of medium height, the rest are short 1 being under 1.5 m.; the median is 1.569 m. (5 ft. 1 3/4 in.).]

### IV. Kenyah Group

Twenty-six KENYAH men and 6 women were measured, consisting of 6 MADANG men, 9 Long Dallo men and 2 women, 9 Apoh men, 4 Long Sinong women, and two other men. All these may be taken as pure Kenyahs, and the following data are based thereon.

HEAD-FORM: THE cephalic indices of the three groups given on Table A range from dolichocephaly to brachycephaly, and it is interesting to note that the Madangs, with a median of 78.1, have distinctly the narrowest heads, intermediate are the Long Dallo men, median 80.5, while the Apoh men, with a median of 84, have distinctly the broadest heads. The head in all is markedly hypsicephalic both as regards the length-height and the breadth-height indices. The shape is described as round in 8 men, oval in 2, ovoid in 3, square in 1, pyriform in 3, and long in 2. The 4 Long Sinong women are distinctly brachycephalic, the mean being 83.2, but the average is 85.1, owing to one having an index 93.8. They also are very hypsicephalic.

FACE: Six men are recorded as having pentagonal faces, 3 broad and 3 long; alveolar prognathism is noted in 2. All are chamaeprosopic as regards the total facial index, and all except 1 Madang and 2 Long Dallo men as regards the upper facial index. The forehead is upright in 10 men, 1 is noted as bulging and 1 as sloping. The cheek-bones are moderate in 12 men, prominent in 6 men (1 very marked) and 2 women, and broad in 1 of each sex. The lips are, as a rule, moderately full, but are thin in 3. The chin is fairly well developed. NOSE: One man is leptorhine, 6 are mesorhine, 13 platyrhine, 6 hyper-platyrhine. The 2 Long Dallo women are mesorhine, the 4 Long Sinong women are strongly platyrhine. The profile is straight in 14 men, a few others varied. The base is slightly reflected in 14 men, straight in 2; the alae are broad in 5 men, small in 2, and the septum is disclosed in 2; the nostrils are wide in 8 men, elongated in 1. EYES: The aperture is moderate in 10 men, wide in 6 men and 3 women, narrow in 7 men; it is straight with no fold in 6 men and 1 woman and with a slight fold in 5 men, slightly oblique with no fold in 5, and with a slight fold in 4 and 2 women, oblique with no fold in 1. The colour is light in 2 men and 1 woman, medium in 15 men and 1 woman, and dark in 7 men and 4 women. EARS: Data were obtained only for the Madang. Type European in 3 (2 doubtful), Negroid 1 (?); angle prominent 2 (?); lobule distended in 4, of medium size in 1 (?); descending helix infolded less than 2 mm. in 2, rather more in 1; tragus 3 — 5 mm. in 5, being double in 1, 5 — 7 mm. in 1; anti-tragus absent in 1, trace in 1, under 3 mm. in 3, 3 — 5 mm. in 1; anti-helix below level of helix in 2, about at the same level in 1.

HAIR: It is straight in 7 men and 1 woman, wavy in 14 men and 2 women, curly in 2 men. The colour is dark brown in 3 men, rusty black in 15 men and 5 women, black in 5 men and 1 woman. It is usually long and moderately abundant on the head; face hair was observed in 2 men, and a small amount on the body in 5.

SKIN: The average skin colour is various shades of cinamon; 11 are cinamon (6), 16 are light cinamon (14), 14 are lightest cinamon (12), 9 pale fawn (pale 17), 3 dull fawn or light brown (17), 6 pale pinkish buff (11).

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STATURE: 7 men (3 Madangs, 3 Long Dallos, 1 Long Tikan) are of medium height; the rest are short; the median is 1.61 m. (5 ft. 31 in.). The stature of the 6 women ranges from 1.42 m. (4 ft. 8 in.) to 1.57 m. (5 ft. 1 3/4 in.).

### V. Kayan Group

Twenty-one KAYAN men and 1 woman were measured.

HEAD-FORM: The cephalic index forms a gradual series with a median of 79.8, all except 5 being brachycephalic. The head is distinctly hypsicephalic, only 5 being mesocephalic as regards length-height. Five were noted as oval, 2 ovoid, 1 square ovoid, 3 round.

FACE: The form varies, 3 being more or less pentagonal, 2 squarish, 2 round, and 5 oval. All are chamaeprosopic except 1 man in the total facial and upper facial indices, and 1 of each sex in the upper facial index. The forehead is upright in 6, and rounded and full in 6. The cheek-bones are moderate in 14, and prominent in 3. The lips are moderately full, being noted as thick in 2 men. The chin is fairly well developed, with 3 exceptions. NOSE: Ten are mesorhine and the remainder platyrhine, of whom 5 are hyper-platyrhine, 2 of these latter are boys (aged 15); the excessive platyrhiny is due mainly to the shortness of the nose in the three adults. The profile is straight in 16 and moderately concave in 3; the root is slightly depressed in 11 and high in 6; the base is reflected in 11 and straight in 4; the nostrils are transversely oval in 2, oval in 5, and round in 5. EYES: The aperture is narrow in 12 and medium in 4; it is straight with no fold in 8 and with a slight fold in 2, slightly oblique with no fold in 2 and with a slight fold in 6; 1 man with a straight eye and no fold is noted as having a lash fold which is the character of a Mongolian upper eyelid. The colour is light in 6, medium in 10, and dark in 3. EARS: Type European in 2, European to Negroid in 3, orang in 3; angle slightly prominent in 2; lobule distended in 5, perforated in 2; descending helix absent in 1, infolded less than 2 mm. in 8; Darwin's point absent; tragus under 3 mm. in 5, 3 — 5 mm. in 4; anti-tragus under 3 mm. in 8, 3 — 5 mm. in 1; anti-helix below level of helix in 4, about at the same level in 4, distinctly beyond in 1.

HAIR: It is straight in 6, wavy in 12, wavy to curly in 1, and curly in 1 (Pl. 22); the colour is rusty black in 12, black in 6, and dark brown in 1.

SKIN: The average skin colour is a light cinamon (14) or pale fawn (pale 17).

STATURE: All but 3 of the men are of short stature, the median being 1.550 m. (5 ft. 1 in.).

[Forty-eight male and 30 female KAYANS were measured by Nieuwenhuis, also 1 Mahakam Kayan of each sex. Of these 5 were boys under 16 and 5 girls under 16, who will be omitted from the description where it is possible to distinguish them.

HEAD-FORM: The cephalic index of the men forms a gradual series from 75 to 85.4 with 6 higher indices; 8 are dolichocephalic, the median of the whole series of adult men being 81.1; that of the women ranges from 75 to 93.2, with a slight weakening in the series about where the median 82.5 occurs; one index, 97, falls considerably outside; 4 are dolichocephalic. The Mahakam man has an index of 78.3, the woman 74. 1.

FACE: One Kayan had a long face, 14 per cent (including children) had broad faces, the rest were medium. In our and his Kayans the bi-zygomatic breadth ranges from 132 to 150 mm., except that two of his are narrower, 126 and 129 mm. NOSE: Breadth-measurements agree with ours. Two males and 1 female are noted as having concave noses, 35 and 20 as broad and flat, 9 and 8 as straight, 1 of each sex as narrow and straight. These characterisations are of course not mutually exclusive. No convex noses were observed; 4 per cent are concave ("depressed," "sunken," or "hollow"). EYES: The Mongolian fold does not occur. The iris is always dark.

HAIR: 28 per cent of the males and 17 per cent of the females had wavy hair, 1 man had curly hair, the rest straight. As a rule it is rather scanty, but 30 per cent of the Kayans had a moderate amount. The colour is black.

SKIN: The colour is brown or yellow.

STATURE: Two men are tall, 6 medium and the rest short, 6 being below 1.5 m., of whom 2 are under 18 years old; the median is 1.572 (5 ft. 2 in.). The women over 23 average 14 cm. shorter than the men; this is a large difference, as it is usually 10 — 12 cm., as in our Sarawak figures.]

### VI. Iban (or Sea Dayaks) Group

Fifty-six IBAN men were measured by us.

HEAD-FORM: The cephalic index forms a gradual series, the median being 83, and therefore shows brachycephaly. The head is usually hypsicephalic, but 1 is platycephalic as regards breadth-height, 2 are mesocephalic both in length-height and breadth-height, 5 are mesocephalic in length-height and 3 in

## Pagan Tribes of Borneo, V1

breadth–height. Thirteen are noted as round, 7 as ovoid, 4 as oval, several had broad parietal and narrow frontal regions producing a pyriform *norma verticalis*.

**FACE:** The form is noted as pentagonal in 10, oval in 5, broad oval in 4, the narrowness of the jaw producing the pentagonal shape. The majority are *chanaeoprosopic*, but 1 is *leptoprosopic* in total facial and upper facial indices, and 7 are *leptoprosopic* in upper facial index. The forehead is generally full or slightly bulging, but may be straight and vertical; 3 are noted as being sloped. The cheek–bones are prominent in 20, and moderately so in 24. The lips are moderately full. The chin is small and moderately prominent. **NOSE:** Sixteen are *mesorhine*, 21 *platyrhine*, and 19 *hyper–platyrhine*. The profile is concave in 23, straight in 18 and nearly so in 4; the root is more or less high in 19, more or less depressed in 20, in most cases it is broad or moderately so; the base is straight in 24, reflected in 25, deflected in 3; the *alae* are wide in 8, moderate in 6, small in 9; the nostrils are oval in 10, transversely oval in 8, round in 13, wide in 9. **EYES:** The aperture is narrow in 13, medium in 18, wide in 3; it is straight with no fold in 10 and with a slight fold in 11, slightly oblique with no fold in 10 and with a moderate fold in 21. The majority are normal as regards the eyelashes, but 3 have a distinct Mongolian character and 5 have it slightly. The colour is intermediate in 25, dark in 22, light in 5, 4 cases were noted with a bluish margin to the iris. **EARS:** Type European in 31, European to Negroid in 2, Negroid in 2, orang flattened above in 1; angle slightly prominent in 22, rather more so in 1, prominent in 8, more so in 1, very prominent in 1; lobule distended in 10 and perforated in 5, very small in 1, small in 13, being adherent in 4, rather small in 1, medium in 10, 1 being adherent, 2 perforated, and 1 doubtful; descending helix absent in 2, infolded less than 2 mm. in 23, 2 — 4 mm. in 13; Darwin's point an infolded tip in 1, an inrolled knob in 2, absent in the rest; tragus under 3 mm. in 11, being double in 1, slightly larger in 1, 3 — 5 mm. in 25, being double in 3, 5 — 7 mm. in 1; anti–tragus absent in 4, under 3 mm. in 24, 3 — 5 mm. in 8, 5 — 7 mm. in 1; anti–helix below level of helix in 23, about at the same level in 15.

**HAIR:** It is straight in 16, wavy in 26, curly in 2, 1 being described as crisp. The colour is rusty black in 26, black in 17, and dark brown in 1. Eight men had a slight amount of hair on the face; the body hair is absent or very scanty, but one had a quantity on his legs.

**SKIN:** Five are dark warm cinamon, 27 cinamon (6), 5 light cinamon (14), 11 dull fawn (17), 11 light brown (near 17), 5 various shades of a light greenish sepia (light 3 1), 3 a still lighter greenish sepia.

**STATURE:** One man is tall, 11 are of medium stature, and the remainder short, 2 being under 1.5 In.; the median is 1.585 m. (5 ft. 2 1/2 in.).

Thirteen SIBUYAU men were measured by Mr. Shelford and 1 by us.

**HEAD–FORM:** All but two are *brachycephalic*, the median being 83. Mr. Shelford did not measure the radii and so the height indices cannot be given.

**FACE:** All are *chamaeprosopic* with regard to the total facial index and all except 3 in the upper facial index.

**NOSE:** Two are *leptorhine*, 7 *mesorhine*, and 5 *platyrhine*.

**STATURE:** All the men are short, 3 being under 1.5 m.; the median is 1.535 m. (5 ft. 1 in.).

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### NOTES

[1] — Published in the JOURNAL OF THE ANTHROPOLOGICAL INSTITUTE, vol. xxxi.

[2] — Within Borneo the distribution of the MAIAS seems to be largely determined by his incapacity to cross a river, there being several instances in which he occurs on the one but not on the other bank of a river.

[3] — See especially the recently published HISTORY OF SARAWAK UNDER ITS TWO WHITE RAJAHS, by S. Baring-Gould and C. A. Bampfylde, London, 1910.

[4] — Crawfurd, DESCRIPTIVE DICTIONARY, p. 140.

[5] — Despite Crawfurd's opinion this is now an accepted fact. Raffles's HISTORY OF JAVA contains much interesting information on the point, and there is a remarkable statement which has not obtained the attention that it deserves, showing that the Chinese recognised the similarity between the Java and Soli (Nagpur) alphabets. — Groeneveldt, NOTES ON MALAY ARCHIPELAGO AND MALACCA; Trubner's ESSAYS RELATING TO INDO-CHINA, vol. i. p. 166.

[6] — There is a Bruni still alive whose hands have been cut off for theft.

[7] — This account is taken from Groeneveldt (LOC. CIT.) who, however, supposes Poli to be on the north coast of Sumatra. In this he follows "all Chinese geographers," adding "that its neighbourhood to the Nicobar Islands is a sufficient proof that they are right." But Rakshas, which may have been "for a long time the name of the Nicobar Islands, probably on account of the wildness and bad reputation of their inhabitants," is merely Rakshasa, a term applied by the Hindu colonists in Java and the Malay Peninsula to any wild people, so that the statement that to the east of Poli is situated the land of the Rakshas is hardly sufficient support for even "all Chinese geographers." Trusting to "modern Chinese geographers," Groeneveldt makes Kaling, where an eight-foot gnomon casts a shadow of 2.4 feet at noon on the summer solstice, to be Java, that is to say, to be nearly 5[degree] south of the equator. Having unwittingly demonstrated how untrustworthy are the modern geographers, he must excuse others if they prefer the original authority, who states that Poli is south-EAST of Camboja, the land of the Rakshas EAST of Poli, to "all" geographers who state on the contrary that Poli is south-WEST of Camboja, the Rakshas' country WEST of Poli. The name Poli appears to be a more accurate form of Polo, the name by which Bruni is said to have been known to the Chinese in early times.

[8] — Rajah Charles Brooke, TEN YEARS IN SARAWAK, quoted in Ling Roth's valuable work, THE NATIVES OF SARAWAK AND BRITISH NORTH BORNEO, vol. ii. p. 279.

[9] — E. H. Parker, CHINA, p. 33.

[10] — Groeneveldt, LOC. CIT.

[11] — Marsden, HISTORY OF SUMATRA, p. 383.

[12] — Than camphor, tortoiseshell, ivory, and sandal woods.

[13] — There is some doubt as to the date of the foundation of Majapahit.

[14] — According to a Malay manuscript of some antiquity lent to us by the late Tuanku Mudah, one of the kings (BATARA) of Majapahit had a beautiful daughter, Radin Galo Chindra Kirana. This lady was much admired by Laiang Sitir and Laiang Kemitir, the two sons of one Pati Legindir. On the death of the king, Pati Legindir ruled the land and the beautiful princess became his ward. He, to satisfy the rival claims of his two sons, promised that whoever should kill the raja of Balambangan (an island off the north coast of Borneo), known by the nickname of Manok Jingga, should marry the princess. Now at the court there happened to be Damar Olan, one of the sons of Raja Matarem, who had disguised his high descent and induced Pati Legindir to adopt him as his son. This young man found favour in the princess's eyes, and she tried to persuade her guardian to let her marry him. Pati Legindir, however, declared that he would keep to his arrangement, and roughly told the lover to bring Manok Jingga's head before thinking of marrying the princess. So Damar Olan set out with two followers on the dangerous mission, which he carried out with complete success. On his return he met his two rivals, who induced him to part with the head of the royal victim, and then buried him alive in a deep trap previously prepared. Pati Legindir, suspecting nothing, ordered his ward to marry Laiang Sitir, who brought the trophy to the palace; but the princess had learned of the treachery from one of the spectators, and asked for a week's delay. Before it was too late, Damar Olan, who had managed to find a way out of what nearly proved a grave, reached the court and told his tale, now no longer concealing his rank. He married the princess and afterwards was entrusted by Pati Legindir with all the affairs of state. Having obtained supreme power, Damar Olan sent his treacherous rivals to southern Borneo, with a retinue of criminals mutilated in their ear-lobes and elsewhere as a penalty for incest. These transported convicts, the ancestors of the Kayans, landed near Sikudana and spread into the country between the Kapuas and Banjarmasin. It is interesting to see how this tale agrees with other traditions.

The Kayans state that they came across the sea at no distant date. Javan history relates that Majapahit was ruled during the minority of Angka Wijaya by his elder sister, the princess Babu Kanya Kanchana Wungu. A neighbouring prince, known as Manok Jengga, took advantage of this arrangement by seizing large portions of the young king's domains. One, Daram Wulan, however, son of a Buddhist devotee, overthrew him and was rewarded by the hand of the princess regent. When Angka Wijaya came of age he entrusted the care of a large part of his kingdom to his sister and brother-in-law.

[15] — SEJARAH MALAYA, edited by Shellabear, Singapore, 1896, p. 106.

[16] — Whose descendants are the Malanaus.

[17] — Cf. Low, JOURNAL STRAITS BRANCH ROYAL ASIATIC SOCIETY, vol. v. p. 1, from whose article we have obtained much interesting material.

[18] — This is said to have been accomplished by Alak ber Tata's brother, Awang Jerambok, the story of whose dealings with the Muruts is well known both to Brunis and Muruts. He set out one day for the head of the river Manjilin, but lost his way after crossing the mountains. After wandering for three days he came upon a Murut village, whose inhabitants wished to kill him. He naturally told them not to do so, and they desisted. After some time, which he spent with these rude folk, then not so far advanced into the interior, he so far won their affections that they followed him to Bruni, where they were entertained by the sovereign and generously treated. These Muruts then induced their friends to submit.

[19] — Founded after the capture of Malacca by the Portuguese, 1512 A.D. (Crawfurd, DESCRIPTIVE DICTIONARY). Sultan Abdul Krahar, great-great-grandson of Sultan Mohammed's younger brother, died about 1575 A.D. From this fact and the statement that Mohammed stopped the Majapahit tribute, we may infer that the latter sat on the throne of Bruni in the middle of the fifteenth century; if this inference is correct, the story of his visit to Johore must be unfounded.

[20] — Some say he was never converted, others that he was summoned to Johore expressly to be initiated into Islam.

[21] — He is also alleged to have seized the lady in a drunken freak. It is stated that the Sultan was so much enraged at this that he proposed to make war on Bruni. His minister, however, suggested that enquiries should be made into the strength of that kingdom before commencing operations. He was accordingly sent to Bruni, where he was so well received that he married and remained there, with a number of followers. Word was sent to Johore that the princess was treated as queen and was quite happy with her husband. This appeased the Sultan's wrath. An old friend of ours belonging to the Burong Pingai section of Bruni, that is to say, the old commercial class, says that his people are all descended from this Pengiran Bandahara of Johore, and that the name Burong Pingai is derived from the circumstance that their ancestor had a pigeon of remarkable tameness.

[22] — Cf. with Dalrymple's account of the origin of the Sulu Sultanate, JOURNAL INDIAN ARCHIPELAGO, iii. 545 and 564. See also Lady Brassey's LAST VOYAGE, p. 165.

[23] — He puts the longitude 30[degree] too far east; but in his day, of course, there were no chronometers.

[24] — Cited in full by Crawfurd, DESCRIPTIVE DICTIONARY OF THE INDIAN ISLANDS. Article, "Brunai."

[25] — Much of the following information is extracted from an article by J. R. Logan on European intercourse with Borneo, JOURNAL INDIAN ARCHIPELAGO, vol. ii. p. 505.

[26] — The article in the JOURNAL INDIAN ARCHIPELAGO says 1702.

[27] — Crawfurd, DESCRIPTIVE DICTIONARY, p. 37.

[28] — 1811 to 1815.

[29] — It seems not unreasonable to conjecture that the uniformly high physical standard of the Punans and their seemingly exceptional immunity from disease are due to their exposed mode of life, and to the consequently severe selection exercised upon them by their environment.

[30] — The Sea Dayak is exceptional in this respect; he wears a coat of coloured cotton fibre woven in various patterns by the women.

[31] — See Chap. XII.

[32] — The turban is a head-dress which is copied from the Malays and is rapidly spreading inland.

[33] — This toy cross-bow is found among Kayans. Both it and the arrow used are very crudely made.

[34] — The war dress and accoutrements will be more fully described in Chap. X.

[35] — Accidental tearing of the lobe inevitably occurs occasionally; and if this is attributed to the carelessness of any other person a brass TAWAK or gong must be paid in compensation. Repair of a torn lobe is sometimes effected by overlapping the raw ends and keeping them tied in this position for some weeks.

[36] — Some of the copper coins of Sarawak are perforated at the centre.

[37] — By the Kayans the heads are suspended in a single long row from the lower edge of a long plank, each being attached by a rattan passed through a hole in the vertex. Many of the Klemantans hang them in a similar way to a circular framework, and the Sea Dayaks suspend them in a conical basket hung by its apex from the rafters.

[38] — The sub-tribes are the following: — Uma Pliau, Uma Poh, Uma Semuka, Uma Paku, and Uma Bawang, chiefly in the basin of the Baram; in the Rejang basin — the Uma Naving, Uma Lesong, Uma Daro; in the Bintulu basin — the Uma Juman; in the Batang Kayan — the Uma Lekan; in the Kapuas — the Uma Ging; the Uma Belun, the Uma Blubo scattered in several river-basins; and one other group in the Madalam river, and one in the Koti.

[39] — All the Kenyahs of the Baram are known as Kenyah Bauh. On the watershed between the Batang Kayan and the Baram are the Lepu Payah and the Madang. In the Batang Kayan basin are the Lepu Tau, the Uma Kulit, Uma Lim, Uma Baka, Uma Jalan, Lepu Tepu. In the Koti basin are the Peng or Pnihing; in the Rejang the Uma Klap. These are the principal branches of the pure Kenyahs; each of them comprises a number of scattered villages, the people of each of which have adopted some local name. In addition to these there is a number of groups, such as the Uma Pawa and the Murik in the Baram, and the Lepu Tokong and the Uma Long in the Batang Kayan, the people of which seem to us to be intermediate as regards all important characters between the Kenyahs and the Klemantans. (For discussion of these relations see Chap. XXI.)

[40] — For the marriage ceremony see Chap. XVIII.

[41] — We take this opportunity of contradicting in the most emphatic manner a very misleading statement which of all the many misleading statements about the peoples of Borneo that are in circulation is perhaps the most frequently repeated in print. The statement makes its most recent reappearance in Professor Keane's book THE WORLD'S PEOPLES (published in 1908). There it is written of the "Borneans" that "No girl will look at a wooer before he has laid a head or two at her feet." To us it seems obvious that this state of affairs could only obtain among a hydra-headed race. The statement is not true of any one tribe, and as regards most of the "Borneans" has no foundation in fact. Applied to the Sea Dayaks alone has the statement an element of truth. Among them to have taken a head does commonly enhance a wooer's chances of success, and many Sea Dayak girls and their mothers will taunt a suitor with having taken no head, but few of them will make the taking of a head an essential condition of the bestowal of their favour or of marriage. A mother will remark to a youth who is hanging about her daughter, BISI DALAM, BISI DELUAR BULI DI TANYA ANAK AKU (When you have the wherewithal to adorn both the interior and the exterior of a room (I.E. jars within the room and heads without in the gallery) you can then ask for my child).

[42] — For the naming ceremony see Chap. XVIII.

[43] — It is not rare to find that a child does not know the original names of his parents, and even husbands may be found to have forgotten the original names of their wives.

[44] — We append to this chapter a table showing the names and degrees of kinship of all the inhabitants of one Kenyah long house. At the suggestion of Dr. W. H. R. Rivers, who has found this method of great value in disentangling the complicated kinship systems of some Melanesian and Papuan and other peoples, we have collected similar information regarding Kayan, Sea Dayak, Klemantan, and Murut villages. But in no case does the table discover any trace of any elaborate kinship system.

[45] — They are skilled woodmen, and know how to cut a tree so as to ensure its falling in any desired manner; the final strokes cut away the ends of the narrow portion of the stem remaining between the upper and lower notches.

[46] — See Chap. X.

[47] — See Chap. XVII.

[48] — The same connection of ideas is illustrated by the practice of sterile women who desire children sleeping upon the freshly gathered ears in the huts in the fields.

[49] — See Chap. XVIII.

[50] — See Chap. V.

[51] — See Chap. XVII.

[52] — See Chap. XV.

[53] — There are said to be two other less common species of wild pig, but probably there is only one other.

[54] — A good account, taken mainly from Skertchly, of many traps may be found in Mr. Ling Roth's well-known work, *THE NATIVES OF SARAWAK AND BRITISH NORTH BORNEO*, London, 1896; and also in McPherson's work on *FOWLING*.

[55] — A stick of this kind is used in many rites. It is prepared by whittling shavings from a stick and leaving them attached at one end; so that a series of the shavings projects along one side of the stick.

[56] — A similar practice prevails in the Malay Peninsula.

[57] — On one occasion on which a race between twenty-two of these war-boats was rowed at Marudi on the Baram river, we timed the winning-boat over the down-stream course of four and half miles. The time was twenty-two minutes thirteen seconds.

[58] — There is no reason to suppose that the Kayan augurs have not complete faith in the significance of the omens, and in the reality of the protection afforded by the favourable omen-birds, which they speak of as upholding them. Nevertheless, there can be no doubt that the strong faith of the people in the omen-birds, and the awe inspired by them, is very favourable to the maintenance of discipline and obedience to the chiefs, and that this fact is appreciated by the chiefs. The cult of the omen-birds, which hampers the undertakings of these peoples at almost every turn, and which might seem to be wholly foolish and detrimental, thus brings two great practical advantages: namely, it inspires confidence, and it promotes discipline and a strong sense of collective unity and responsibility. It is not improbable, then, that the advantages of this seemingly senseless cult outweigh its drawbacks, which in the shape of endless delays and changes of plans are by no means small.

[59] — So far as we know this is the only way in which the bow and arrow is used in Borneo, although the principle of the bow is frequently applied in making traps. It is perhaps worthy of remark that the dense character of the jungle is probably more favourable to use of the blow-pipe than to that of the bow and arrow.

[60] — It is probable that the observation of this practice by Europeans has given rise to the frequently published statements that the tribes of the interior are cannibals. We affirm with some confidence that none of the peoples of Borneo ever consume human flesh as food. It is true that Kayans, Kenyahs, and Klemantans will occasionally consume on the spot a tiny piece of the flesh of a slain enemy for the purpose of curing disorders, especially chronic cough and dysentery; and that Ibans, men or women, during the mad rejoicings over captured heads will occasionally bite a head, or even bite a piece of flesh from it. A third practice involving the consumption of human flesh was formerly observed among the Jingkangs (Klemantans of Dutch Borneo); when a son was seriously ill and the efforts of the medicine-men proved ineffective, an infant sister of the patient was killed and a small piece of the flesh given to the patient to eat. It would, we think, be grossly unfair to describe any of these peoples as cannibals on account of these practices.

[61] — At one such feast eighty-five pigs and fifty-six fowls were slaughtered.

[62] — See footnote, vol. i., p. 76.

[63] — The Malays of Bruni and the other coast settlements have, of course, used iron, and perhaps to some small extent forged it, since the time when they adopted Arab civilisation; but they have not at any time practised the smelting of iron ore. Between three and five hundred years ago the principal currency of the people of Bruni consisted of small oblong flattened pieces of iron known as *SAPANGGAL* (about 2 [ERROR: unhandled ×] 1 [ERROR: unhandled ×] 1/4 inches) bearing the Sultan's stamp. This iron was probably obtained from Chinese and other foreign traders, and was worked up into implements.

[64] — The convenience of thus floating the timber is one reason for the general tendency shown by Kayans to migrate gradually down river.

[65] — This is an example of a very common type of practice which implies the belief that the attributes of any object will attach themselves to any whole into which the object may be incorporated as a part; thus a hunter who has shot dead a pig or deer with a single bullet will cut out the bullet to melt it down with other lead, and will make a fresh batch of bullets or slugs from the mixture, believing that the lucky bullet will leaven the whole lump, or impart to all of it something of that to which its success was due. Compare also the similar practice in regard to the seed grain (vol. i., p. 112).

[66] — The pair of centre columns and the main columns supporting the roof back and front should have been drawn thicker than the accessory columns supporting the floor, and the width of the roof-plates is much greater than is indicated in the diagrams.

[67] — Some Kayans habitually speak of most of the dog-patterns by the term USANG ORANG (which means the prawn's head). This indicates possibly some gradual substitution of designs of the one origin for those of the other.

[68] — "Materials for a Study of Tatu in Borneo," by Charles Hose and R. Shelford, J.R.A.I. vol. xxxvi. Here also we have to thank the Council of the Royal Anthropological Institute for permission to republish part of this paper, and to reproduce the plates and figures accompanying it. The reference figures of this section refer to the bibliographical list at the end of this chapter.

[69] — Since these pages were printed we have had to mourn the loss of our friend and fellow-worker, cut off in the early summer of a life strenuously devoted to scientific research.

[70] — Nieuwenhuis also notes (9, p. 451) that men in the course of their travels amongst other tribes permit themselves to be tattooed with the patterns in vogue with their hosts.

[71] — These figures refer to the bibliography printed at the end of this chapter, vol. i., p. 280.

[72] — The Sea Dayaks often employ for the same reason a carpal bone of the mouse-deer (TRAGULUS).

[73] — See also Haddon (4, Fig. 2), and Nieuwenhuis (8, Pls. XXV. and XXVI.); the designs figured in the latter work are not very easy to interpret, the lower of the two rosette figures looks as if it was derived from four heads of dogs fused together. See also Ling Roth (7, p. 85).

[74] — In ancient days when a great Kayan or Klemantan chief built a new house, the first post of it was driven through the body of a slave; this sacrifice to a tutelary deity is no longer offered, but a human figure is frequently carved on the post of a house and may be a relic of the old custom; the figure is called TEGULUN. Sea Dayak anthropomorphs are termed ENKRAMBA and appear in cloths and bead-work designs, also in carvings on boundary marks, witch-doctor's baskets, etc.

[75] — We apply the term SERIAL to those designs in which the units of the pattern are repeated, or in which the units follow each other in serial order; the UDOH ASU on a Kayan man's thigh is an ISOLATED design, but the design on his hands is a SERIAL design.

[76] — Cf. Ling Roth (7, p. 34) and Nieuwenhuis (9, Pl. 32).

[77] — The Sea Dayak word TELINGAI or KELINGAI has the same meaning.

[78] — The prices in the Baram river are much higher than in the Mendalam, where a gong can only be demanded by an artist of twenty years' experience; less experienced artists have to be content with beads and cloth (9, p. 452).

[79] — The wooden block is carefully cut square, and the design occupies the whole of one surface; this is characteristic of the blocks of female designs, whereas designs for male tatu are carved on very roughly shaped blocks and do not always occupy the whole of one surface. Since the female designs have to be serially repeated it is important that the blocks should be of the exact required size, otherwise the projecting parts of the uncarved wood would render the exact juxtaposition of the serially repeated impressions very difficult, whilst the isolated male designs can be impressed on the skin in a more or less haphazard way.

[80] — The drawing is taken from a rubbing of a model carved by an Uma Lekan; this will account for the asymmetry noticeable every here and there throughout the design. A print from an actual tatu-block is shown in Pl. 139, Fig. 7; this would be repeated serially in rows down the front and sides of the thigh, so that absolute uniformity would be attained; the carver of the model, which was about one-sixth life size, has not been able to keep the elements of his design quite uniform.

[81] — For other examples of modified ASU designs employed by Kenyah tribes, see E. B. Haddon (4, pp. 117, 118).

[82] — By this name we denote those Kenyah tribes which stand nearest to the Klemantans and furthest from the Kayans in respect of customs. Cf. Chap. XXI.

[83] — The names of the designs are given in Kayan.

[84] — The same author states that "a sometime headman of Senendan had two square tattoo marks on his back. This was because he ran away in a fight, and showed his back to the enemy." This explanation seems to us most improbable.

[85] — As an instance of a quite opposite effect produced by a mark on the forehead, we may note here, that some Madangs who had crossed over from the Baram to the Rejang on a visit, appeared each with a cross marked in charcoal on his forehead; they supposed that by this means they were disguised beyond all recognition by evil spirits. The belief that such a trivial alteration of appearance is sufficient disguise is probably held by most tribes; Tama Bulan, a Kenyah chief, when on a visit to Kuching, discarded the leopard's teeth, which when at home he wore through the upper part of his ears, and the reason that he alleged was the same as that given by the Madang. These people believe not only that evil spirits may do them harm whilst they are on their travels, but also that, being encountered far from their homes, the spirits will take advantage of their absence to work some harm to their wives, children, or property.

[86] — Dr. Schmeltz has kindly furnished us with an advance sheet of his forthcoming catalogue of the Borneo collection in the Leyden Museum; he catalogues these drawings as tatu marks, but in a footnote records our opinion of them made by letter. Dr. Nieuwenhuis apparently adheres to the belief that they really are tatu marks.

[87] — Mr. E. B. Haddon (4, p. 124) writes: "The tattoo design used by the Kayans and Kenyahs ... has been copied and adopted by the Ibans in the same way as the Kalamantans have done, the main difference being, that the Ibans call the design a scorpion. FOR THIS REASON THE PATTERN TENDS TO BECOME MORE AND MORE LIKE THE SCORPION ... ." The italics are ours. Is not this "putting the cart before the horse"? It is only when the design resembles a scorpion that the term SCORPION is applied to it; all other modifications, even though tending towards the scorpion, are called DOG; PRAWN, or CRAB.

[88] — The following statement, which was written by us of the Kenyahs in a former publication, holds good also of the Kayans: "They may be said to attribute a soul or spirit to almost every natural agent and to all living things, and they pay especial regard those that seem most capable of affecting their welfare for good or ill. They feel themselves to be surrounded on every hand by spiritual powers, which appear to them to be concentrated in those objects to which their attention is directed by practical needs; adopting a mode of expression familiar to psychologists, we may say that they have differentiated from a 'continuum' of spiritual powers a number of spiritual agents with very various degrees of definiteness. Of these the less important are very vaguely conceived, but are regarded as being able to bring harm to men, who must therefore avoid giving offence to them, and must propitiate them if they should by ill-chance have been offended. The more important, assuming individualised and anthropomorphic forms and definite functions, receive proper names, are in some cases represented by rude images, and become the recipients of prayer and sacrifice" (JOURN. OF ANTHROP. INSTITUTE, vol. xxxi. p. 174).

[89] — If the dead man possessed no sufficiently presentable garments, these may be supplied by friends. This last act of respect and friendship has not infrequently been permitted to one of us.

[90] — See vol. ii. p. 29.

[91] — See vol. ii. p. 61.

[92] — See vol. ii., p. 137.

[93] — For the views of an individual Kayan on Laki Tenangan, see vol. ii., p. 74.

[94] — See vol. ii., p. 53.

[95] — See Chap. X.

[96] — The idea of giving up a valued possession to the god or spirit in order to appease or propitiate him seems to underlie a curious rite formerly practised by the JINGKANGS, a Klemantan sub-tribe living on the great Kapuas river. These people, like most of the peoples of Borneo, value their male children more highly than their female children. If a boy seems to be at the point of death, and if all other efforts to restore him have proved unavailing, the relatives would kill an infant sister of the boy, and would cause the boy to eat a small bit of the roasted flesh. The intention seems to be to appease some malevolent spirit that is causing the sickness; and the eating of the flesh seems to be considered necessary in order to connect the sacrifice clearly with the sick child.

[97] — Cf. vol. ii., p. 75, for the statement of a Kayan on this question.

[98] — See vol. ii., p. 138.

[99] — See vol. ii., p. 29, for usage of this word.

[100] — This relation is illustrated by the fact that among the charms and objects of virtue which the Kenyahs hang beside the heads in the galleries of their houses, or over the fireplaces in their rooms, are to be found in



many houses one or two specimens of stone axe-heads. The original use of these objects is not known to the great majority of their possessors, who regard them as teeth dropped from the jaw of the thunder-god, BALINGO. It is generally claimed that some ancestor found these stones and added them to the family treasures. A man who possesses such "teeth," carries them with him when he goes to war. The Madang chief TAMA KAJAN ODOH, mentioned in the following note as claiming descent from Balingo, possessed the unusual number of ten such teeth. The credit of having first obtained specimens of these stones from the houses belongs to Dr. A. C. Haddon, who discovered a specimen in a Klemantan house of the Baram basin in the year 1899. The existence of such Stones in native houses in Dutch Borneo had been reported by Schwaner many years before that date.

[101] — When questioned as to this claim, he gave us at once without hesitation the names in order of the ancestors of nineteen generations through whom he traces his descent from Balingo. It is perhaps worth while to transcribe the list as taken down from his lips in ascending order: — KAJAN, TAMA KAJAN ODOH, SIGO, APOI, BAUM ([ERROR: unhandled ]), ODOH SINAN ([female]), ALONG, APOI, LAKING, LAKING GILING, GILING SINJAN, SINJAN PUTOH, PUTOH ATI, ATI AIAI JALONG, BALARI, UMBONG DOH ([female]), KUSUN PATU BALINGO. This succession of names, it will be noticed, is consistent with the custom, common to the Kenyahs and Kayans, of naming the father after his eldest child.

[102] — There are four words used by the Kayans to express the notion of the forbidden act, MALAN, LALI, PARIT, and TULAH. All these are used as adjectives qualifying actions rather than things; but they are not strictly synonymous terms. MALAN and PARIT seem to be true Kayan words; LALI and TULAH to have been taken from the Malay, and to be used generally by Kayans in speaking with Kenyahs or men of other tribes to whom these words are more familiar than the Kayan terms.

MALAN applies rather to acts involving risks to the whole community, PARIT to those involving risk to the individual committing the forbidden act: thus, during harvest it is MALAN for any stranger to enter the house, and the whole house or village is said to be MALAN; but it is PARIT for a child to touch one of the images. Again, it is not MALAN for the proper persons to touch the dried heads on certain occasions, but it is always in some degree PARIT for the individual, and for this reason the task is generally assigned to an elderly man. LALI and TULAH seem to be the LINGUA FRANCA equivalents of MALAN and of PARIT respectively.

[103] — "The Relations between Men and Animals in Sarawak," J. ANTH. INST. vol. xxxi.

[104] — We are not aware that the "bull-roarer" is put to any other uses than this by any of the tribes.

[105] — See Chap. XIII.

[106] — Vol. ii., p. 120.

[107] — The word BALI is used on a great variety of occasions, generally as a form of address, being prefixed to the proper name or designation of the being addressed or spoken of. The being thus addressed is always one having special powers of the sort that we should call supernatural, and the prefix serves to mark this possession of power. It may be said to be an adjectival equivalent of the MANA of the Melanesians or of the WAKANDA or ORENDA of North American tribes, words which seem to connote all power other than the purely mechanical. It seems not improbable that the word BALI has entered the Kayan language from a Sanskrit source; for in Sanskrit it was prefixed to the names of priests and heroes. The word is even more extensively used by the Kenyahs, who prefix it to the names of several of their gods; and the Klemantans use the word VALI in the same way.

[108] — This procedure seems to be one of the many varieties of "crystal gazing" that are practised among many peoples; and it seems probable that the DAYONG, in some cases at least, experiences hallucinatory visions of the scenes that he so vividly describes as he gazes on the polished metal. The sword so used becomes the property of the DAYANG.

[109] — These beads seem to be designed for use by the ghost in paying for its passage across the river of death.

[110] — Among some of the peoples it is customary to beat a big gong while this operation is in progress, or, in the case of a woman, a drum, in order to announce to the inhabitants of the other world the coming of the recently deceased. The beating of gongs is in general use for signalling from house to house.

[111] — Small articles specially valued by the deceased are enclosed in the coffin; thus, OYANG LUHAT, a Kayan PENGHULU (see Chap. XXII.), who bled slowly to death from an accidentally inflicted wound, gave strict instructions as he lay dying that his certificate of office bearing the Rajah's signature and his Sarawak flag,

the public badge of his office, should be put in his coffin with his body; and there can be no reasonable doubt that he hoped to display them, or rather their ghostly replicas, in the other world. As a clear instance of such belief it seems worth while to mention the following case. One of us had given some coloured prints to a Kayan boy, an only son to whom his parents were much attached. On a subsequent visit he was told by the bereaved mother that the child had been very fond of the pictures, and that she had put them in his coffin because she knew that he would like to look at them in the other world.

[112] — Among Klemantans it is usual to spoil all articles hung upon a tomb; and they give the reason that in the other world everything is the opposite of what it is here: the spoilt shall be perfect, the new and unspoilt shall be old and damaged, and so on. It is probable that the real or original motive for this practice is the desire to avoid placing temptations to theft in the way of strangers.

[113] — Among some of the Klemantan tribes the opposite practice of shaving the whole scalp is observed in mourning.

[114] — In some of the remoter forts of the Sarawak government old heads that have been confiscated are kept, and are occasionally lent for the purpose of enabling a village to go out of mourning without shedding human blood.

[115] — When pressed in private after a ceremony of this kind, a certain DAYONG admitted to us that perhaps, if we should look into the house, we should see the food apparently untouched; but he maintained that nevertheless all the strength or essence of the food would have been consumed, the husks merely being left.

[116] — Apparently it is not that the DAYONG claims to be "possessed" by the soul of the dead man; for from time to time he inclines his ear again to the soul-house to catch the faint voice of the ghost. We know of no cases in which it is claimed that the body of a living man is "possessed" by a departed soul.

[117] — Cases occur among the Kayans, though but rarely. The method most employed is to stab a knife into the throat.

[118] — In one such case the body was laid out in the gallery of the house and preparations for the funeral were far advanced, when one of us (C. H.) arrived. On glancing at the alleged corpse he suspected that life was not extinct, and succeeded, by the application of ammonia to the nostrils, in restoring the entranced Kayan to animation, and shortly to a normal condition of health.

[119] — The man mentioned in the foregoing footnote had given to a DAYONG (no doubt in response to leading questions) a circumstantial account of adventures of this kind, before we had an opportunity of questioning him after an interval of some ten days. He then admitted that he could remember nothing clearly.

[120] — The cry of this species is peculiar; it terminates with an interrupted series of cries that sound like mocking laughter.

[121] — See below, vol. ii. p. 130.

[122] — The incident was reported by Dr. Hose to the British Consul at Bruni, who entered an effective warning against repetitions of such acts.

[123] — A dangerous madman is generally kept shut up in a large strong cage in the gallery of the house.

[124] — It is believed that the tatuing on the woman's hands and forearms illuminates for the ghost dark places traversed on the journey to the other world.

[125] — Coco-nuts are commonly opened by two blows with a sword struck upon opposite sides, and it seems probable that the method of splitting the jar was suggested by this practice.

[126] — In this chapter we have departed from our rule of describing first and most fully the facts and beliefs of the Kayan people, because before planning this book we had paid special attention to this topic, and had obtained fuller information in regard to the Kenyahs than to other peoples, and had published this in the form of a paper in the JOURNAL OF THE ANTHROPOLOGICAL INSTITUTE ("The Relations between Men and Animals in Sarawak," J. ANTH. INSTIT. vol. xxxi.). This paper, modified and corrected in detail, forms the substance of this chapter. We wish to express our thanks to the Council of the Royal Anthropological Institute of Great Britain and Ireland for permission to make use of this paper.

[127] — We find that the practices of these people in connection with omens or auspices so closely resemble those of the early Romans that it seems worth while to draw attention to these resemblances, and we therefore quote in footnotes some passages from Dr. Smith's DICTIONARY OF CLASSICAL ANTIQUITIES, referring to the practice of the Romans: "In the most ancient times no transaction, whether private or public, was performed

without consulting the auspices, and hence arose the distinction of AUSPICIA PRIVATA and AUSPICIA PUBLICA."

[128] — See Chap. XXII.

[129] — "No one but a patrician could take the auspices."

[130] — "Romulus is represented to have been the best of augurs, and from him all succeeding augurs received the chief mark of their office."

[131] — "Hence devices were adopted so that no ill-omened sound should be heard, such as blowing a trumpet during the sacrifice."

[132] — "The person who has to take them (the auspices) first marked out with a wand ... a division of the heavens called 'templum,' ... within which he intended to make his observations."

[133] — "It was from Jupiter mainly that the future was learnt, and the birds were regarded as his messengers."

[134] — "The Roman auspices were essentially of a practical nature; they gave no information respecting the course of future events, they did not inform men what was to happen, but simply taught them whether they were to do or not to do the matter purposed; they assigned no reason for the decision of Jupiter, they simply announced — Yes or No."

[135] — "It was only a few birds which could give auguries among the Romans. They were divided into two classes: Oscines, those which gave auguries by singing or their voice; and Alites, those which gave auguries by their flight." "There were considerable varieties of omen according to the note of the Oscines or the place from which they uttered the note; and similarly among the Alites, according to the nature of their flight."

[136] — "They endeavoured to learn the future, especially in war, by consulting the entrails of victims."

[137] — This phrase as commonly used implies the exchange of greetings.

[138] — See Chap. XII.

[139] — Of the Romans it is said: "When a fox, a wolf, a serpent, a horse, a dog, or any other kind of quadruped, ran across a person's path or appeared in an unusual place, it formed an augury."

[140] — JOURN. OF STRAITS ASIATIC SOCIETY, Nos. 8, 10, and 14.

[141] — See Chap. XXII.

[142] — See Chap. XVII.

[143] — In the paper from which the greater part of this chapter is extracted this word was spelt NYARONG. It is now clear to us that it should be spelt as above, with the initial NG, a common initial sound in the Sea Dayak language. The most literal translation of the word is, the thing that is secret, or simply, the secret, or my secret.

[144] — Almost every Iban possesses and constantly carries with him a bundle of such objects; they are regarded as charms and are called PENGAROH; but few probably claim to enjoy the protection of a secret helper.

[145] — INTRODUCTION TO COMPARATIVE PSYCHOLOGY, and elsewhere.

[146] — Now that the sacrifice of human victims is forbidden, Kenyahs and Klemantans sometimes carve a human figure upon the first of the main piles of a new house to be put into the ground.

[147] — See vol. ii., p. 4.

[148] — Quoted in Mr. Frazer's TOTEMISM, 1st ed., 1887, p. 8.

[149] — Aban Jau possessed a large curiously shaped pig's tusk which he wore on his person in the belief that any firearm fired at it would not go off. It is probable that his belief in this charm was connected with his belief in the dream-pig. The belief was very genuine, until in a moment of excessive confidence he hanged the tusk upon a tree and invited one of us to fire at it. The tusk was shattered. Aban Jau said nothing; but presumably a process of disintegration began in his mind; for after some hours he remarked that his charm had lost its power.

[150] — Dr. Boas is of the opinion that the totems of the Indians of British Columbia have been developed from the personal MANITOU, the guardian animals acquired by youths in dreams. Miss A. C. Fletcher is led to a similar conclusion by a study of the totems of the Omaha tribe of Indians (IMPORT OF THE TOTEM, Salem, Mass., 1897). The facts described above in connection with the NGARONG of the Ibans and similar allied institutions among other tribes of Sarawak would seem, then, to support the views of these authors as to the origin of totemism.

[151] — Sixteen different methods, most of which combine the notion of soul-catching with that of exorcism, are enumerated and described by Mr. E. H. Gomes in his recent work, SEVENTEEN YEARS AMONGST THE

DAYAKS OF BORNEO.

[152] — In a recent note in the JOURNAL OF THE SARAWAK MUSEUM, Jan. 1911, Mr. W. Howell states that the power of TAU TEPANG is supposed to be transmitted in certain families from generation to generation; that the head of a TAU TEPANG man leaves his body at night and goes about doing harm, especially to the crops; that the power is passed on to a child of a TAU TEPANG family by the mother, who touches the cut edge of the child's tongue with her spittle.

[153] — Cf. BAWANG DAHA, the lake of blood of the Kayan Hades, vol. ii., p. 40.

[154] — The people are naturally reticent about this rite. The facts were brought to our knowledge by a case which is instructive in several ways. A Sebop had murdered a Chinese trader and taken his head. He was ordered to surrender himself for trial at the fort within the space of one month, and informed that he would be taken alive or dead if he failed to present himself. He refused and took to the jungle. Upon which one of the up-country chiefs (Tama Bulan) was commissioned to arrest him. The murderer was found in the jungle and called on to surrender, but refused, and died fighting. At this his brother was enraged against the chief and made the TEGULUN against him; and being at a distance from his victim, the man was at no pains to keep the matter secret, and it came to the ears of the chief. He, although the most enlightened native in the country, felt uneasy under this terrific malediction and complained to the Resident, who insisted on a public taking back or taking off of the curse.

[155] — A free translation runs: —

"O holy DAYONG; thou who lovest mankind, Bring back thy servant from Leman, The region between the lands of life and death, O holy DAYONG."

[156] — See vol. ii., p. 11.

[157] — Although breach of custom and of LALI by any individual may bring misfortune on the whole household, the offending individual is regarded as specially liable to wasting sickness with diarrhoea and spitting of blood.

[158] — We have a wooden image of this being. It is rudely anthropomorphic, and is covered with fish-like scales. Its sex is indeterminate. He is supposed to ascend the river from the sea, kneeling on the back of a sting-ray.

[159] — The sword handle is sometimes made of hard wood, but generally of deer's horn, very elaborately carved (see Pl. 129). It seems possible that this elaborate carving which, in spite of many minor variations, is of only two fundamental types, is or was at one time connected with this myth. But we have not been able to get any statement to this effect.

[160] — The creeper is here regarded as the male partner.

[161] — Cf. an Iban story given in Perham's "Sea-Dayak Gods," J.S.B.R.A. SOC. ix. 236.

[162] — This greeting of the passer-by and the charging him with some commission is very characteristic of the Ibans.

[163] — A form of trial by ordeal occasionally practised by Ibans and other tribes.

[164] — This refers to the difference of colour between the carapace and the plastron.

[165] — Refers to the flat under surface contrasting with the rounded back.

[166] — See vol. i. p. 139.

[167] — This is the only mention of rain-making that has come to our notice among any of the Borneans.

[168] — This notion of an atmosphere or "odour" of virtue attaching to material objects pervades the thought and practice of Kayans. As another illustration of it, we may remark that a Kayan will wear for a long time, and will often refuse to wash, a garment which has been worn and afterwards given to him by a European whom he respects.

[169] — We give the original and translation of one such lullaby: —

"Megiong ujong bayoh Mansip anak yap — cheep, cheep. Lematei telayap, Telayap abing, Lematei Laki Laying oban, Lematei Laki Punan oban."

The translation runs: —

"The branches of the bayoh tree are swaying With the sound of little chicks—cheep, cheep, The lizards are dead, There are no lizards any more, Gray-haired Laki Laying is dead, The old jungle man is dead."

The reference to the Punan in this lullaby may be explained by saying that the children are frightened sometimes by being told that the jungle man will take them.

[170] — The PENGHULU is the leading chief of a district; cf. Chap. XXII.

[171] — Even when in tatuing blood is drawn, as almost inevitably occurs, beads are given the tatuer to indemnify her and make it clear that the deed was not intended.

[172] — It came into use, no doubt, through the hospitable offering of cigarettes by the women of the household.

[173] — The omen birds are not consulted in the hope of obtaining favourable omens; but rather special events are regarded as of evil omen; such are any outbreak of fire in the house, any fatal accident to any member of the house, the repeated crying of the muntjac (the barking deer) about the house. In one instance known to us the attractive daughter of a Kenyah chief had three times been compelled by series of bad omens to break off the betrothals.

[174] — Some few communities of Punans live in the large caves of the limestone mountains; it seems possible that this is a survival of a very ancient custom that preceded the making of shelters, however rude; but we know of no facts which can be regarded as supporting this view, save that we have found human bones of uncertain age in several caves. Some of these caves have undoubtedly been used as burial-places, possibly during epidemics of cholera or smallpox.

[175] — See Chap. XXI.

[176] — Perhaps the most commonly used is a double-ended spatula. With this the head of the family stirs the boiled sago, and then conveys it to his own mouth on one end and to his wife's mouth on the other.

[177] — Formerly, they say, they cooked in green bamboos; and this is still done occasionally. They also occasionally boil their sago in the large cups of the pitcher-plant (NEPENTHES).

[178] — This occurrence of incest between couples brought up in the same household is, of course, difficult to reconcile with Prof. Westermarck's well-known theory of the ground of the almost universal feeling against incest, namely that it depends upon sexual aversion or indifference engendered by close proximity during childhood. But medical men who have experience of slum practice in European towns can supply similar evidence in large quantity. And the medical psychologists of the school of Freud could cite much evidence against this theory.

We cannot refrain from throwing out here a speculative suggestion towards the explanation of the feeling against incest which seems to find support in certain of the facts of this area. It seems to us that the feeling with which incest is regarded is an example of a feeling or sentiment engendered in each generation by law and tradition, rather than a spontaneous reaction of individuals, based on some special instinct or innate tendency. The occurrence of incest between brothers and sisters, and the strong feeling of the Sea Dayaks against incest between nephew and aunt (who often are members of distinct communities), are facts which seem to us fatal to Prof. Westermarck's theory, as well as to point strongly to the view that the sentiment has a purely conventional or customary source. Now, if we accept some such view of the constitution of primitive society as has been suggested by Messrs. Atkinson and Lang (PRIMAL LAW), namely, that the social group consisted of a single patriarch and a group of wives and daughters, over all of whom he exercised unrestricted power or rights; we shall see that the first step towards the constitution of a higher form of society must have been the strict limitation of his rights over certain of the women, in order that younger males might be incorporated in the society and enjoy the undisputed possession of them. The patriarch, having accepted this limitation of his rights over his daughters for the sake of the greater security and strength of the band given by the inclusion of a certain number of young males, would enforce all the more strictly upon them his prohibition against any tampering with the females of the senior generation. Thus very strict prohibitions and severe penalties against the consorting of the patriarch with the younger generation of females, I.E. his daughters, and against intercourse between the young males admitted to membership of the group and the wives of the patriarch, would be the essential conditions of advance of social organisation. The enforcement of these penalties would engender a traditional sentiment against such unions, and these would be the unions primitively regarded as incestuous. The persistence of the tendency of the patriarch's jealousy to drive his sons out of the family group as they attained puberty would render the extension of this sentiment to brother-and-sister unions easy and almost inevitable. For the young male admitted to the group would be one who came with a price in his hand to offer in return for the bride he sought. Such a price could only

be exacted by the patriarch on the condition that he maintained an absolute prohibition on sexual relations between his offspring so long as the young sons remained under his roof.

It is not impossible that a trace of the primitive state of society imagined by Messrs. Atkinson and Lang survives in the fact that a Kayan chief may, if he is so inclined, temporarily possess himself of the wife of any of his men without raising the strong resentment and incurring the penalties which would attend adultery on the part of any other man of the house; but the law against incest with his daughters, whether natural or adopted, would be enforced against him by the co-operation of the chiefs of neighbouring houses and villages.

[179] — A limestone cliff whose foot is washed by the Baram river and which contains a number of caves (known as Batu Gading, or the ivory rock) is said by a Kayan legend to have been formed by a Kayan house being turned into Stone owing to incestuous conduct within it.

[180] — This would not be always true of similar cases among Sea Dayaks.

[181] — See vol. ii. p. 296 for a striking example of self-control displayed by this great man under most trying circumstances.

[182] — Only one evil effect of the success of these efforts for the spread of peace has come under our notice, namely, a tendency in some communities to economise labour by building flimsy houses in place of the massive and roomy structures which were fortresses as well as dwelling-places.

[183] — The desire of the people inhabiting a branch of the river to shut themselves off from all intercourse with the areas in which an epidemic disease is raging, is sometimes disregarded by Malay or Chinese traders; such disregard has sometimes led to trouble.

This desire for seclusion as a safeguard against epidemics is by no means peculiar to the tribes of the interior of Borneo, but seems to be shared by many savage and barbarous peoples. It is one that ought to be strictly respected by all travellers; and we have no doubt that the disregard of this desire by European explorers, ignorant, no doubt, of its existence or of the practical and rational grounds on which it is based, has been the cause in many cases of their hostile reception by native tribes and potentates, and has led to bloodshed and punitive expeditions which might have been wholly avoided if the explorers had been equipped with some general knowledge of, and some respect for, the principles of conduct of savage peoples.

[184] — In view of the valuable properties now attributed to spermin in some scientific quarters, it would be rash to assert that this treatment can have no therapeutic value. It is of interest to note that prolonged working of camphor in the jungle is said to produce impotence and that, in order to avoid this, the workers make frequent breaks and will not prolong a camphor-gathering expedition beyond a limited period. For impotence is regarded by a young Kayan as a very great calamity.

[185] — It seems possible that the Punans acquire some degree of immunity to the effects of the IPOH poison through constantly handling it and applying it in the ways mentioned above. The only evidence in support of this that we can offer is the fact that the Punans handle their poisoned darts much more recklessly than the other peoples.

[186] — There is current among the Klemantans a larger number of such myths than among the Kayans.

[187] — The second occurred during the residence of one of us (C. H.) in the Baram, and the alarm of the people was largely prevented by the issue to all the chiefs of TEBUKU (tallies) foretelling the date of its incidence. Nevertheless one woman, at least, was so much frightened by the spectacle that she ran into her house and dropped down dead.

[188] — See vol. ii. p. 272.

[189] — The horn of the small and rare Bornean rhinoceros is the most highly valued of the various substances out of which the sword hilts are carved.

[190] — Although it is impossible to form any estimate of the numbers of such imported slaves of negroid type, it is, we assert, a fact that some have been imported. We have trustworthy information of the possession of two Abyssinian slaves in recent times by a Malay noble.

[191] — In the course of measuring and observing the physical characters of some 350 individuals of the various tribes, we recorded in each case the eye characters. Of a group of 80 subjects made up of Kenyahs, Klemantans, and Punans (who in this respect do not differ appreciably from one another), we noted a moderately marked Mongolian fold in 14 subjects, the rest having in equal numbers either no fold or but a slight trace of it. As regards obliquity of the aperture, in rather more than half it was recorded as slight, in one quarter as lacking,

and in the rest as moderate. As regards the size of palpebral apertures, half were noted as medium, and about one quarter as small, and the remaining quarter as large. In the main, obliquity and smallness of aperture go with the presence of the Mongolian fold. The most common form of eye in this group may therefore be described as very slightly oblique, moderately large, and having a slight trace of the Mongolian fold.

[192] — THE RACES OF MAN, p. 486, London, 1900.

[193] — OP. CIT. p. 392.

[194] — MAN, PAST AND PRESENT, London, 1899, pp. 562 and 143.

[195] — Prof. A. H. Keane (MAN, PAST AND PRESENT, p. 206), after citing the statements of various observers to the effect that persons of almost purely Caucasian or European type are not infrequently encountered among several of the tribes of Upper Burma, Tonking, and Assam, notably the Shans, and the allied peoples known as Chins, Karens, Kyens, and Kakhyens, writes: "Thus is again confirmed by the latest investigations, and by the conclusions of some of the leading members of the French school of anthropology, the view first advanced by me in 1879, that peoples of the Caucasian (here called 'Aryan') division had already spread to the utmost confines of south-east Asia in remote prehistoric times, and had in this region even preceded the first waves of Mongolic migration radiating from their cradleland on the Tibetan plateau." While we accept this view, so ably maintained by Keane, it is only fair to point out that J. R. Logan, in a paper published in 1850, had maintained that a Gangetic people (by WHICH HE meant a people formed in the Gangetic plain by the blending of Caucasian and Mongoloid stocks) had wandered at a remote epoch into the area that is now Burma, following the shore of the Indo-Malayan sea; and that he recognised the Karens and Kakhyens as the modern representatives of this people of partially Caucasian origin ("The Ethnology of Eastern Asia," THE JOURNAL OF THE INDIAN ARCHIPELAGO, vol. iv. p. 481, 1850).

[196] — Nieuwenhuis publishes a photograph of such carvings found in the Mahakan or Upper Kotei river. They included fragments of a cylindrical column and what seems to be a caparisoned kneeling elephant. QUER DURCH BORNEO, vol. ii. p. 116.

[197] — "The Ethnology of Eastern Asia," JOURN. OF INDIAN ARCHIPELAGO, vol. iv. p. 478.

[198] — We have not been able to find any full and satisfactory description of the Karens, but we have brought together whatever statements about them and the tribes most nearly related to them seem significant for our purpose from the following sources. The figures in brackets in the text refer to this list.

(1) J. R. Logan, "The Ethnology of Eastern Asia," LOC. CIT. (2) Lieut.-Col. James Low on "The Karean Tribes of Martaban and Javai," JOURN. OF INDIAN ARCH., vol. iv. (3) A. R. McMahon, THE KARENS OF THE GOLDEN CHERSONESE, London, 1876. (4) E. B. Cross, "The Karens," JOURN. OF THE AMER. ORIENTAL SOC., 1854. (5) T. Mason, "The Karens," JOURN. OF THE ASIATIC SOC., 1866, part ii. (6) D. M. Smeaton, THE LOYAL KARENS OF BURMA, London, 1887. (7) J. Anderson, FROM MANDALAY TO MOMIEN. (8) Lieut.-Col. Waddell, "Tribes of the Brahmaputra Valley," JOURN. OF THE ROYAL ASIATIC SOC., 1900. (9) A. R. Colquhoun, AMONG THE SHANS, London, 1885. (10) T. C. Hodson, NAGA TRIBES OF MANIPUR, London, 1911. (11) T. C. Hodson, "The Assam Hills," a paper read before the Geographical Society of Liverpool in 1905. (12) Sir J. G. Scott, BURMA. (13) A. H. Keane, MAN, PAST AND PRESENT, London, 1899. (14) J. Deniker, THE RACES OF MAN, London, 1900.

[199] — The cross-bow is used as a toy by Kayan boys only.

[200] — Cp. the Kayan APO LEGGAN, vol. ii. p. 40.

[201] — This, however, is a statement which perhaps might loosely be made of the Kayans. Cp. vol. ii. p. 34.

[202] — [The Kuki's are normally not considered Nagas. They live in the same area, but are far more recent immigrants from Burma, and differ considerably from the Nagas. — J.H.]

[203] — It is worthy of note that the Kayans have long used and highly prize for the decoration of their swords the hair of the Tibetan goat dyed a dark red, and have continued to obtain this hair at a great price from Malay and Chinese traders. The wild tribes of the Chin hills, said to be closely akin to the Kukis, adorn their shields with tassels of goat's hair dyed red (see THE CHIN HILLS, by B. S. Carey and H. N. Tuck, Rangoon, 1896). According to the same authorities, these Chins are inveterate head-hunters. They read omens in the livers of pigs and other beasts, and in the cries of birds; they wear a loincloth like the Kayan Bah; they scare pests from their PADI fields by means of an apparatus like that used by Kayans (vol. i. p. 102); they floor their houses with

huge planks hewn out with an adze very similar to the Kayan adze.

[204] — Some communities of Malanaus never plant rice, but rely for their principal food supply upon the numerous sago-palms which they have planted round about their villages. It is doubtful whether these have ever cultivated PADI on any considerable scale.

[205] — Deniker (RACES OF MAN, p. 392) describes, under the name MOIS, an aboriginal tribe of Annam in terms which show that they present many points of similarity with the Muruts.

[206] — The Malay does not, like the Iban, make use of the various animal designs, but confines himself to simple geometrical patterns — but this difference is probably a result of the adoption of the Moslem religion.

[207] — Most Ibans now procure the PARANG ILANG of the Kayans and copy their wooden shields.

[208] — The fire-piston is found also in North Borneo, but with this exception is peculiar to the Ibans among the pagan tribes. It has been widely used by the Malays of the peninsula and those of Menangkaban in Sumatra (see H. Balfour, "The Fire Piston," in volume of essays in honour of E. B. Tylor).

[209] — The general use of this mat is common to the Kenyahs, Punans, and most of the Klemantans, but it is comparatively rare among the Kayans; this is a significant fact, for such a mat is more needed by a jungle dweller than by one whose home is a well-built house. We have not met with any mention of such a mat among the tribes of the mainland.

[210] — See the vocabularies of the Kayan, Kenyah, and Kalabit (Murut) languages recently published by Mr. R. S. Douglas, Resident of the Baram district, in the JOURNAL OF THE SARAWAK MUSEUM, Feb. 1911.

[211] — This is clearly shown in the article "BALI" of Monier Williams's SANSKRIT DICTIONARY.

[212] — For a full account of these transactions and for the later history of Sarawak in general the reader may be referred to the recently published SARAWAK UNDER TWO WHITE RAJAHS, by Messrs. Bampfylde and Baring-Gould, London, 1909.

[213] — The principles according to which the government has been conducted cannot be better expressed than in the following words of H. H. Sir Charles Brooke, the present Rajah. Writing in the SARAWAK GAZETTE of September 2, 1872, he observed that a government such as that of Sarawak may "start from things as we find them, putting its veto on what is dangerous or unjust and supporting what is fair and equitable in the usages of the natives, and letting system and legislation wait upon occasion. When new wants are felt it examines and provides for them by measures rather made on the spot than imported from abroad; and, to ensure that these shall not be contrary to native customs, the consent of the people is gained for them before they are put in force. The white man's so-called privilege of class is made little of and the rules of government are framed with greater care for the interests of the majority who are not European than for those of the minority of superior race."

[214] — See pp. 417 — 420 of Messrs. Bampfylde and Baring Gould's TWO WHITE RAJAHS.

[215] — These three masks were afterwards given to the Resident, and are now in the British Museum.

[216] — "A Savage Peace-Conference," by W. McDougall, THE EAGLE, the magazine of St. John's College, Cambridge, 1900.

[217] — The dollar is the Straits Settlements dollar; its value in English money is two shillings and fourpence.

[218] — This Company has enjoyed, for more than half a century, the right to work minerals in Sarawak, paying royalty to the government; it has been and is the principal channel through which the natural products of the country have been brought into the world's markets. It has always worked in harmony with the government, and to the judicious conduct of its affairs the present material prosperity of the country is largely due. An important development of the Company's activity in recent years has been the planting of large areas with the Para rubber-plant.

[219] — The beneficent and active interest taken by the Rajah in the prosperity of the natives, and the paternal character of his government, are well illustrated by a recently issued order. It is within the memory of all that in the years 1910 and 1911 occurred the great rubber "boom" in the markets of Europe. With the hope of vast profits, speculators hurried to every region where rubber was known to grow. The seeds of the Para rubber-plant had been introduced to Sarawak many years before; the suitability of the soil and climate for the production of the best quality of Para rubber had been abundantly demonstrated and the natives had been encouraged to plant for their own profit the seeds and young plants which were distributed to them from the government stations, so that when the boom came many of them possessed small plantations of the trees that "lay the golden eggs." The



speculators were everywhere seeking to buy these plantations at prices which, though they seemed handsome to the natives, were low enough to provide a very large profit to the buyers. The Rajah caused warnings to be published and brought to the notice of the natives, and informed them that they were at full liberty to appropriate jungle land for the formation of rubber plantations, and that their tenure of such lands would be secured to them so long as they cared for the trees and worked the rubber properly. He further ordered that no sales of rubber plantations should be effected without the knowledge and approval of the government.

[220] — The Rajahs of Sarawak have personally chosen and appointed their white officers with the greatest care; and their good judgment has secured for their country the services of a number of Englishmen of high abilities and sterling moral quality. Of those members of the Sarawak service who have passed away, the following have pre-eminent claims to be gratefully remembered by the people of the country: James Brooke Brooke (nephew of the first Rajah), W. Brereton, A. C. Crookshank, J. B. Cruickshank, C. C. de Crespigny, A. H. Everett, H. Brooke Low, C. S. Pearse, and, above all, F. R. O. Maxwell.

[221] — Crawford, a leading authority on the history of the East Indian Islands, wrote of the Dutch in Borneo of the early times — "Their sole object, according to the commercial principles of the time, was to obtain, through arrangements with the native prince, the staple products of the country at prices below their natural cost, and to sell them above it... The result of these (arrangements) was the decline of the trade of Banjermasin; its staple product, pepper, which had at one time been considerable, having become nearly extinct" (DICTIONARY OF THE INDIAN ISLANDS, Lond., 1865, p. 65).

[222] — 'QUER DURCH BORNEO,' by A. W. Nieuwenhuis.

[223] — Dr. A. W. Nieuwenhuis, "Anthropometrische Untersuchungen bei den Dajak." Bearbeitet durch Dr. J. H. F. Kohlbrugge, MITT. AUS DEM NIEDERL. REICHSMUS. FÜR VOLKERK. ser. ii. No. 5, Haarlem, 1903. Owing to the inaccessibility of this memoir, I have incorporated his more important observations in this essay.

[224] — Swaving, G., NATUURK. TIJDSCHR. V. NED. IND., xxiii., 1861, xxiv., 1862.

Hoeven, J. van der, CATALOGUS CRANIORUM DIVERSARUM GENTIUM.

Virchow, R., Z.F.E., xvii., 1885, p. (270), in which he states that of 47 "Dayak" skulls in the museums of Paris, Amsterdam, and the Royal College of Surgeons, London, 20 were dolichocephalic, 12 mesaticephalic, and 15 brachycephalic. Cf. also Z.F.E., xxiv., 1892, p. (435).

Hagen, B., VERH. D. KON. AKAD. D. WETENSCH. NATUURKUND, xxviii., Amsterdam, 1890.

Waldeyer, W., Z.F.E., xxvi., 1894, p. (383).

Zuckerlandl, E., MITT. D. ANTHROP. GESELL. WIEN, xxiv., 1894, p. 254.

Kohlbrugge, J. H. F., L'ANTHROPOLOGIE, ix., 1898, p. 1.

Volz, W., ARCH. F. ANTHROP., xxvi., 1900, p. 719.

Haddon, A. C., ARCHIV. PER L' ANT. E L' ETNOL., xxxi., 1901, p. 341.

[225] — Nieuwenhuis usually speaks of these as Ulu Ajar Dajak. I have more than once deprecated this use of the term "Dayak" as it has simply come to mean a non-Malayan inhabitant of Borneo, for example, we find "Kenjah Dajak" on his map. In Sarawak this term is confined to the Sea Dayaks and Land Dayaks, for the former I have suggested that the native name Iban be adopted, but I have not been able to find a suitable native name for the Land Dayaks of Sarawak who are probably allied to the Ulu Ayas.

[226] — The foregoing statement is taken from Nieuwenhuis, but Dr. Hose sends me the following remarks: "PARI is the word for PADI in both Kayan and Kenyah language.

"The Uma Timi and Uma Klap of the Upper Rejang are possibly Bahautribes but the four Kayan tribes of the Upper Rejang, the Uma Bawang, Uma Naving, Uma Daro and Uma Lesong say that they came from Usun Apo or Apo Kayan as Nieuwenhuis calls it.

"The Kayans in the Kapuas are the Uma Ging, and the only Kayans that I know of in the Bulungan river are the Uma Lekans: there are no Kayans or Kenyahs in the Limbang river.

"Apo Kayan or Usun Apo is the country from which the Batang Kayan river or Bulungan, the Kotei, and their great tributaries rise on the one side, and the tributaries of the Rejang and Baram on the other. It extends from the Bahau river in the north to the Mahakam in the south. The Kenyahs of the Baram are spoken of by the people of the Batang Kayan as Kenyah Bau."

[227] — In order to make Kohlbrugge's data comparable with ours I have in all cases grouped his youths and

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girls over 16 with the adults, and have left those younger out of reckoning.

[228] — I.E. having an index of 77.9 and under.

[229] — This was drawn up by Dr. Hose from his general knowledge of the people of Sarawak, and it will be found to agree very closely with the anthropometric data, thus we may regard it as expressing the present state of our knowledge of the affinities of the several tribes.