We Ended in Bali

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CHAPTER 1

Snowy Start for the Tropics

It is a long way from Riksgränsen to Indonesia. It is a long way, calculated in miles, from the land of the midnight sun to the islands of the equatorial sun. Still greater is the distance in human terms between gaily clad Lapps and the equally gaily clad Indonesians, peoples who do not know of each other's existence.

Ever since the wheel was invented the world has been shrinking—for those who can make use of the wheel. To those who ski over the mountains and those who go bare-footed through the jungle the world today looks much the same as it did to their ancestors centuries ago.

Thus the distance in time between Riksgränsen and Indonesia is both less and more than what is shown on the map—an experience which was to be deeply impressed upon me.

It was at Riksgränsen, at the Lapplandia tourist station, that my journey to the world of equatorial islands had its birth. I was showing pictures of Swedish animals there, and when the lights were turned on in the hall a man came up to me and asked:

'Where are you going next?'

I replied that I was thinking of a trip to South America. But my plans were still rather vague: nothing had been decided yet.

'Why don't you go to Indonesia instead?'

Indonesia? I am a photographer, and pictures I had seen of pretty Bali dancing girls, cine photos and stills from a sunny paradise, crowded into my mind. So I replied:

'The big shots have been there already.'

'You're to go to Indonesia! I'll pay for the whole thing.'

Of course I thought the fellow was drunk. To avoid any further discussion I said that I was tired and asked if we might discuss the matter further next day. By that time this man of lightning decisions would have sobered down and forgotten all about it.

He asked shortly and politely what time would suit me, and I replied eleven o'clock.

The meeting with him next day was a great surprise to me. It led to a year of hard work, to severe disappointments and great joy. But above all it led to my spending a year and a half in parts of the world to which I had previously given only passing thoughts.

The man I met at the tourist station on the Norwegian frontier was a Swedish business man with large business interests in Indonesia. Every year he made an allowance to a Swedish engineer for study in Indonesia. But although the allowance meant free board and lodging for a whole year in the realm of the three thousand islands, it was difficult to get hold of people who would accept the munificent gift. Engineers liked to go to the United States, a country already developed industrially, rather than to Indonesia, immeasurably rich in raw materials but technically under-developed.

Now a photographer could get the allowance. A harvest of pictures, and perhaps some films from the newly freed country, might open the eyes of a good many people to undreamed of possibilities. Would I take the allowance, and if I did when could I start?

I thanked him, rather confused, and asked for time to make my preparations. According to the airlines' posters it is quite easy to board a plane in a blizzard and winter darkness and drop straight into the brilliant light of the tropics a couple of days later. A man who is going to do a job in remote countries—and who does not really believe that the tropics are as tidy, with iced drinks always conveniently within reach, as they are on the posters—needs plenty of time to make arrangements for his new task.

During this time of preparation, which lasted a whole year, much water flowed through the straits that separate the Indonesian islands. Economic

and political conditions had become such that the Swedish Foreign Office strongly advised me not to go. Also, the troubles in Indonesia had caused the Swedish business man such heavy losses that he could not keep the promise he had made in all good faith.

Seeking Animals and Finding Men

I went to Indonesia all the same—and to other places as well. In April 1956 I flew by SAS to Bangkok in Siam and from there I travelled by train to Singapore via Kuala Lumpur. I went by sea to Jakarta in Java, but after that all my longer journeys were made by air. Before I returned to Stockholm at the end of September 1957, by SAS via Tokyo and over the North Pole, I had flown from Jakarta to Darwin in Australia, to Sydney, Melbourne and Alice Springs, from Darwin back to Jakarta and thence to Bangkok and Hongkong.

This is just a list of names of towns and says nothing about why I was travelling. My disappointment at not getting the allowance was great, it would be absurd to deny it. I had given time and work to my preparations; I had read everything I came across about Indonesia, and tried to learn some useful phrases in some of the more important of the many languages which are spoken there. I had become interested in the world of islands and its eighty million people, its flora and fauna. Would all my labour have been in vain? Could it be that the brief meeting up at Riksgränsen had put a spoke in my wheel and upset all my plans?

Thus there was a negative reason for bringing off the trip. It may perhaps be called obstinacy, unwillingness to give up, pig-headedness. If no one else helped me to get to Indonesia, all right, I would fix it up myself. A tour of Sweden with the nature film 'In our Lord's Pasture' brought in a good deal of money, foreign photographer's agents got me a number of orders, and one or two Swedish papers ordered pictures.

But, of course, no one goes to the other side of the globe and stays there for a year and a half purely from pig-headedness, from a childish desire to assert oneself.

During my year of preparation the positive reasons for making the trip worked themselves up by slow degrees through the cloud of disappointment that obsessed my mind, and only now, when the journey is over, have I become fully conscious of them. Only now can I give an account of them, even to myself.

I have been interested in animals from my childhood, and a photographer has better chances of satisfying this interest than most other people, perhaps even than the hunter. A lucky shot with the camera requires more

patience than a lucky shot with a gun, as one always endeavours to photograph an animal in a certain situation and in a certain environment. The hunter's object is something definite: to bring down his quarry. The animal photographer's object is uncertain and embraces an infinite number of variations and possibilities.

There were animals in Indonesia which others had seen, but I had not. Were there also animals which no human being had ever seen, or of which only a few scared natives had caught a glimpse? The dream of the jungle's hidden secrets, of primeval things, of the natural paradise which civilized man has not yet violated, is a living reality to every European who finds his way to the tropics. The greatest moment in the life of a travelling animal photographer is that in which he stands face to face with one of the untamed inhabitants of the jungle. But no copied, projected or printed picture can ever compare with the picture in the seeker's mind; this is the reward for sweat and toil. It is the meeting between silent nature and questioning man.

In seeking animals one discovers people. One finds that the peace of mind which the entry into an exotic world of plants and animals should give comes, perhaps, more than anything else from contact and life with the people whom we, a trifle thoughtlessly, call primitive.

Certainly their existence is primitive if we compare it with the technical, hygienic and economic efficiency of our modern civilization. They are without doubt under-developed materially. But in Indonesia this is a state of things which is changing very quickly. In the world's most densely populated island, Java, there will soon be no jungle left, only an impenetrable jungle of red tape, corruption and bureaucracy.

Primitive man—'savage' or 'native'—is often equipped with an astonishing intelligence. It may be a passive intelligence, which expresses itself in tolerance and respect for the views, the work, the judgments of others. It may be an active intelligence, exemplified by the owner's power to adapt himself cunningly to natural conditions.

At the best it is a harmonious combination of both kinds of intelligence, and this produces human beings who delicately but effectively cure their European fellow-men of all artificiality and make them fit to meet nature in its most luxuriant and at the same time its most naked form, the nature of the tropics.

All Dayaks Before the Lord

At Bogor in Java I heard of a Swede who lived in the neighbourhood. His surname was known too—but I will not attempt to reproduce the

The road into the unknown—as exciting for the photographer as for open-billed storks in Siam

Comfort in Komodo. Forester Pranowo, ranger Sidik and the author at lunch

Swedish name as pronounced in Javanese. Anyhow, my curiosity was aroused, and I set off on a bicycle armed with a rough map.

The afternoon cloud-burst had just begun, and I was wearing a tent-like native protection against rain and had a fiery red frotté towel twisted round my neck, Cycling in pouring rain on Javanese roads, especially on an old-fashioned bicycle with high handle-bars, is something of an athletic performance. I was feeling inclined to let my curiosity about my countryman remain unsatisfied when I came to a 'European' row of houses and saw a man dressed in black running down the garden path under a black umbrella towards a letter-box. I applied the brake, jumped off my bicycle and asked in Swedish:

'Excuse me, but is this the way to Bollnäs?'

The man did not show the least sign of surprise. He replied gravely and amiably, also in Swedish:

'Yes, *tuan*. But you must change shoe-hay at Krylbo!'

It was thus that I met Eric Lundqvist and his wife Sari, who were then living in Java. The little episode throws light on human intercourse in the tropics. Both with white people and with natives one has to think again and revise one's ideas of such fundamental things as, for example, time. In Indonesia time is a bounteous gift of the gods. It is not money. 'Time is cheap, sir!' The sudden and unexpected is no longer a shock, it fits naturally into the sequences of events of the moment.

In a country where nature has the fury of a cloud-burst, the fierceness of the sun's heat or the dramatic quality of a volcano in eruption, one must avoid exciting people. One simply must not break the quiet rhythm which is a kind of self-defence against the surrounding intensity. The worst and commonest fault of the Westerner travelling in the tropics is uppishness, the desire to take the initiative himself, to lead and dominate. Of course one can and sometimes must lead to get a result at all, but one must let the natives feel all the time that they themselves have the initiative. Moreover, it is a question of tact: after all, the Westerner is a guest in their country.

And uppishness—I cannot find any better word for the white man's feeling of innate superiority—always recoils on him in the long run. By being and showing himself superior he stirs up the inferiority complex which always lurks below the surface in the Easterner. It can have catastrophic results, above all by creating panic and hysteria. How many expeditions have had to turn back because a superior snigger on a white man's face has made his companions fear the wrath of the gods!

Superiority puts a man at a distance from others. I think that the Westerner who gets the best human contacts in the tropics is the man who

avoids attracting attention and pushing himself forward. When I was with the Dayaks in Borneo I left my cameras for a whole week quite visible—and unused. Then, when I began to work with the apparatus which everyone had seen and which had lost its strangeness, no one paid any attention to me. And the really great gain to me was that I did not have to photograph staring faces, but could take pictures of the Dayak's daily life as I pleased.

Accepting the fact that one is accepted oneself can be difficult. It is not pleasant to eat for weeks on end bad rice mixed with half-putrid fish. One has to some extent to overcome the hygienic instincts of the West in order to bathe in slimy, yellow, stinking rivers. The first time one jumps in stark naked one has to try to forget all one has ever learnt about bacteria and at the same time console oneself with the thought that we are all Dayaks before the Lord and are constructed in the same way.

The colour of our skins is what distinguishes us. A Kutainese at Tabang, in Central Borneo, explained to me that I lived far from the sun and he close to it, and therefore I was white and he brown. That is the whole truth about skin colour, and no more need be said about it.

Don't Dine With Peacocks!

The profession of photographer is no heroic one. Certainly it may be his task to make a pictorial record of danger, but the most perilous situations leave hardly any time for deliberate photographing.

My journey was primarily a photographic expedition, and I should like to say at once that I do not consider myself to have been in any danger. I am not ashamed to say this, for I am firmly convinced that many travel writers, to make their narratives more exciting, exaggerate the dangers to which one is exposed in the countries near the equator. The risk of being bitten by a snake in Java or Borneo is not much greater than at home in Sweden.

But if one is bitten, it may be by a snake which is much more dangerous than our fairly inoffensive adder. Once four of us were following wild pig in Northern Sumatra. I was stealing along second in the file, bare-footed like the others. Suddenly the man behind me, without a word of warning, flung me into the thorny scrub. The strap of my camera nearly choked me, blood ran from my scratches, and I could not get up without help. I lay there bewildered and swearing loudly in Swedish at my brutal treatment.

The men on the track were occupied with something in the grass. It was an *ular tjabe*, which may be freely translated 'pepper snake'. It had

been scared by the leader of the file and was preparing to bite the second man in the foot or calf. Its bite can cause death. But it was the prettiest snake I had ever seen, bright red with a shimmering blue back. We filmed and photographed it and then let it wriggle away to freedom.

The most dangerous creature with which I have come into contact is undoubtedly the tame peacock Oscar, which belonged to an official of the Swedish Legation in Jakarta. I was sitting alone in the living-room with my typewriter when Oscar came in and in the most impudent manner began to eat the prettily arranged flowers on the table. When I remonstrated with him he flew at me and pecked samples out of my elbow, which I held up to protect my eyes. Not till I was lying in one corner of the room, almost paralysed with fear, did Oscar return to his flowery lunch.

The tropical sicknesses regarded as unavoidable did not attack me, with one exception—perhaps on account of the same thoughtlessness which saved me from the dangers of the jungle. But here, too, I once had a very great stroke of luck.

From Komodo, the island of the giant lizards, the expedition was driven back to Java sooner than had been intended by a sudden outbreak of homesickness among the native members: fear was probably at the bottom of it. In Sumbawa, the third island of any size east of Java, I fell ill with malaria. The island has a population of half a million and only one hospital. I was taken there by my brown friends and lay for a week with a clouded mind, half blind, with a high temperature and terribly emaciated.

A German doctor named Poch was in charge of the hospital. He had come to Sweden, to Gryttjom in Uppland, after the first war as an underfed student and had there regained his strength. He now felt that he had a welcome opportunity of repaying Swedish hospitality, and he therefore refused to take any payment for the excellent care he gave me. By way of thanks I sent him from Java the whole of the travelling medicine chest given me by Astra: it contained a number of things which the little hospital sorely needed.

I have nothing sensational to relate even of the thieving about which I had been given so many warnings. A cynic might say that a native of, say, Sumatra has no great use for a cine camera. It would be truer to say that in these regions, as in others, people are more honest in the country than in the large towns.

The evening before I left Jakarta I had fetched all my documents of value from the safe at the Swedish Legation. Then I went out by train to the port, Tanjung Priok, to go through the customs. When I got into the

train I had my free hand all the time over my hip pocket, which contained my wallet. Then the train gave a jerk and I had to grasp a strap in the roof to save myself from falling.

In that moment my wallet was stolen from my hip pocket and my fountain pen from my breast pocket. The dexterity of the robbery suggested that it was the work of a gang of professional thieves. The members of the gang, however, had the decency to keep nothing but the ready money which they could use themselves. The rest of the booty—driving licence, travellers' cheques, and other papers which were of no value to them—they tied in a bundle and stuffed into a letter-box. When I had reported the theft at the Legation I received a communication from the head post office informing me that some property of mine could be collected there! A postal official had shown a degree of energy fantastic for an Indonesian in seeking out the Swedish owner among the swarming multitudes of the capital.

A Few Photographic Technicalities

Two circumstances make the work of a photographer in the tropical wilds excessively difficult: the weight of the equipment and the high humidity of the warm air. I am endlessly grateful to my friend Pranowo, attached as a student to the Indonesian forestry administration, who was my assistant. His English was as bad as my Javanese. He accompanied me on all journeys of any length: he obtained porters and made agreements about their wages. If he had not helped me with his unfailingly pleasant smile I should probably not have succeeded in transporting my cameras to and fro across Indonesia.

The Swedish Hasselblad 1000 F camera was my trusty companion and established its position as the camera which is good for everything in all conditions. I had two of these cameras, with normal lenses and three telephoto lenses of 15cm, 30cm and 50cm focal length respectively, as well as cassettes and a spare camera case. Also a Hasselblad Superwide Camera and a Leica with a Summarex 8·5cm lens for photographing unnoticed.

The cine camera was a 16mm. Arriflex with five different lenses.

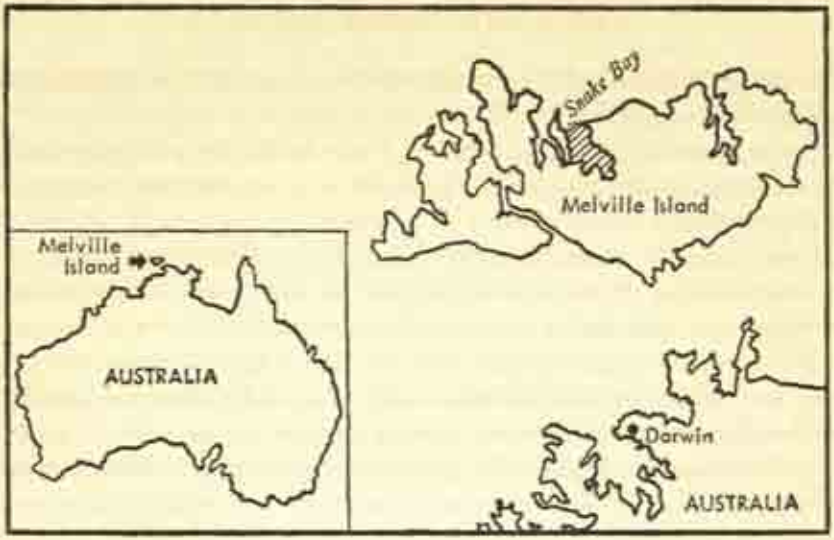
The film material was Kodak Tri-X and Verichrome Pan for black and white, Ektachrome and Kodacolor for colour stills, French 16mm. Kodachrome for colour films.

A pocket laboratory for developing black and white films and with hardening and drying material was invaluable. For the storage of my photographic equipment I had specially made galvanized iron cases with

cork insulation, and also a transportable refrigerator, which is cooled chemically, bought in Australia.

It is not only for the sake of comfort, to be able to enjoy the siesta during the hottest hours of the day, that one avoids mid-day photographing in the tropics. I always tried to work in subdued light and shade, i.e. in the mornings and evenings. The light, the photographer's raw material, is most beautiful at those times. Then, too, both people and animals can be photographed with the best results. The Komodo lizards are an exception to this: they do not leave their holes in the rocks or earth before about nine in the morning and are most active in the heat of the midday sun.

After these disconnected attempts to answer a few questions it is at last time to begin the account of a Swedish photographer's meeting with a world which inspired him, more than with any other feeling, with humble admiration.



CHAPTER 2

An Island Unlike Others

Beneath the aeroplane a long gleaming ribbon, as straight as a ruler, cut the desert in two. It was Stuart Highway, the road from Alice Springs in Central Australia to Darwin up in the north. Far ahead of us the ribbon ran out into a cobalt-blue sea. There lay Darwin out on its point, its square blocks of houses embedded in a riotous cascade of green, in violent contrast to the desert we had been flying over for hours.

All Business Done in the Bar

But it was not Darwin, town of settlers, gold and uranium, that attracted me, dramatic as its history has been since Charles Darwin's friend, Lieutenant Stokes, discovered the excellent harbour in 1839. Melville Island lies off Darwin, and on Melville Island lives the Tiwi people.

Like most other native reserves in Australia, Melville Island is a prohibited area for white men. I could go there only with a special permit from the Department of Native Welfare, and when the department learnt that I was a photographer, and that I intended both to film and to take stills out on the island, its countenance darkened. It was very difficult, I was told,

to get over to the island. The mail plane only went once a fortnight and had just done its regular trip. It was not certain that the authorities down at Canberra would give their consent. I must have a medical examination and a dentist would have to X-ray my teeth. There was nowhere to stay on Melville Island.

But in Australia practically everything of importance is decided at a bar counter; I had learnt that. I walked into the Darwin Club, totally ignoring the usual notice 'members only', with my camera on a strap round my neck. Between the backs at the counter I caught sight of a man with a fair forelock pouring foaming cold beer into glasses. He gave the counter a rub down, summed me up with a quick glance and said:

'You're Swedish, aren't you? You've got a Swedish camera anyhow. My name's Bob. Bob Lundgren from Boden and Strömstad. Glad to meet you! I'll introduce you to the president of the club.'

In less than three minutes I had been elected an honorary member of the Darwin Club. On the membership card it was stated that 'anyone wearing shorts in the club must have white stockings. The wearing of sandals and of shirts outside the trousers is forbidden except on Saturdays, when reasonable sports wear may be allowed. In the ladies' lounge a member must wear trousers after 7 p.m.'

The president introduced me to all the prominent people, and I found that the head of the Department of Native Welfare, Mr. Giese, was quite a different person at a bar from what he was in his office. The doctor promised to examine me the very next day, when I would also be able to meet Bruce Muir, the owner of the aeroplane, which would be warmed up at a nod from me.

Being a barman in Australia is as hot a job as being a moulder in an ironworks. I looked up Bob Lundgren that evening at his house. He had just come off duty and thrown off his wet shirt and was now resting in an easy chair. Like so many Swedes in Australia Bob was an old Transatlantic man. He had cleared out eight years ago, and since then had been sheep-shearer, rabbit hunter, wild pig hunter, steward in the Qantas airline, and was now a barman. A barman has contacts with a lot of people, a fact which was to be of great help to me.

'I'll arrange for you to stay with Sandy at Snake Bay on Melville Island,' said Bob. 'He's the schoolmaster there. A thin chap, a Scotchman and fond of rum. We'll send him a telegram.'

When I presented myself for the medical examination next day all the papers were already filled in and in order, and I needed only to sign them. Sandy MacKay had replied by telegram: 'Welcome with cigarettes and rum.'

The Man Who Chose the Bush

In Darwin only a few small pearling luggers were lying at anchor: probably rough weather out in the Timor Sea had driven them to seek shelter. The aeroplane bumped hard in the air pockets, and the palms at the mission station on Bathurst Island were swaying violently in the wind.

Melville Island was covered with greenery lighter than what one usually sees when flying over jungle. Eucalyptus woods are never dark and gloomy: they look, at least from the air, more accessible than other jungle. Here and there, too, carpet-like, moss-green marshes with brown patches were seen.

Snake Bay was pretty, blue and sheltered, and shaped like a gently rounded boomerang. At the far end of the bay was a clearing like a field, with a few buildings and some galvanized iron roofs. The landing strip, cleared during the war, was now almost overgrown.

Bruce Muir landed and at once set off again to refuel at Darwin and fly a prospector out into the bush on the mainland. So I was left on the prohibited island, alone with my cameras, suit-cases, cigarettes and a case of rum. 'One buys a case at a time for the bush,' Bob Lundgren had said.

A Landrover came driving along in the wheel tracks which led out of the wood and swung round my equipment like a toboggan. Out of the cloud of dust jumped Paul Ingram, head of the reserve. He greeted me and made me welcome, but I returned his greeting absent-mindedly. I had eyes only for the three Tiwis who cautiously slid out of the back seat, their long stick-like legs coming first. Big well-built men, with dark chocolate skin and fuzzy black hair, One of them had a huge beard. The whites of their eyes were shot with reddish brown, and their faces looked cruel. They were quite naked but for a piece of cloth of the same size and cut as bathing drawers. They talked to each other quietly in low voices, and they lifted my luggage into the car just as quietly.

The road wound down to Snake Bay with a thin growth of eucalyptus trees on each side. Here and there it was bordered by empty petrol drums from the war. On a slope down towards the bay lay the only two regular houses in the reserve, one of which was Ingram's. Close to the galvanized iron roofs which stuck up out of the vegetation, here as tall as a man, the car stopped at a shed, of which two-thirds was open and one-third had walls. Here lived Sandy MacKay.

Anyone who can imagine a real Scot who has chosen to work among Australian negroes out in the bush will know what Sandy MacKay is like. Lean and stringy, with his shorts fluttering round his legs. A clear complexion, a shining bald head, a forehead as wrinkled as a

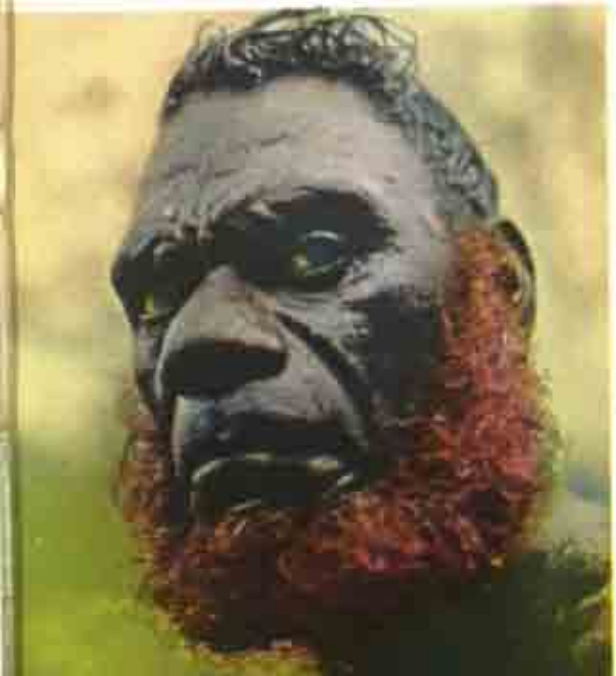
Elegant cookery on Melville Island. Two dark chocolate-brown gourmets, squatting at their ease, grill a mangrove crab over an open fire.

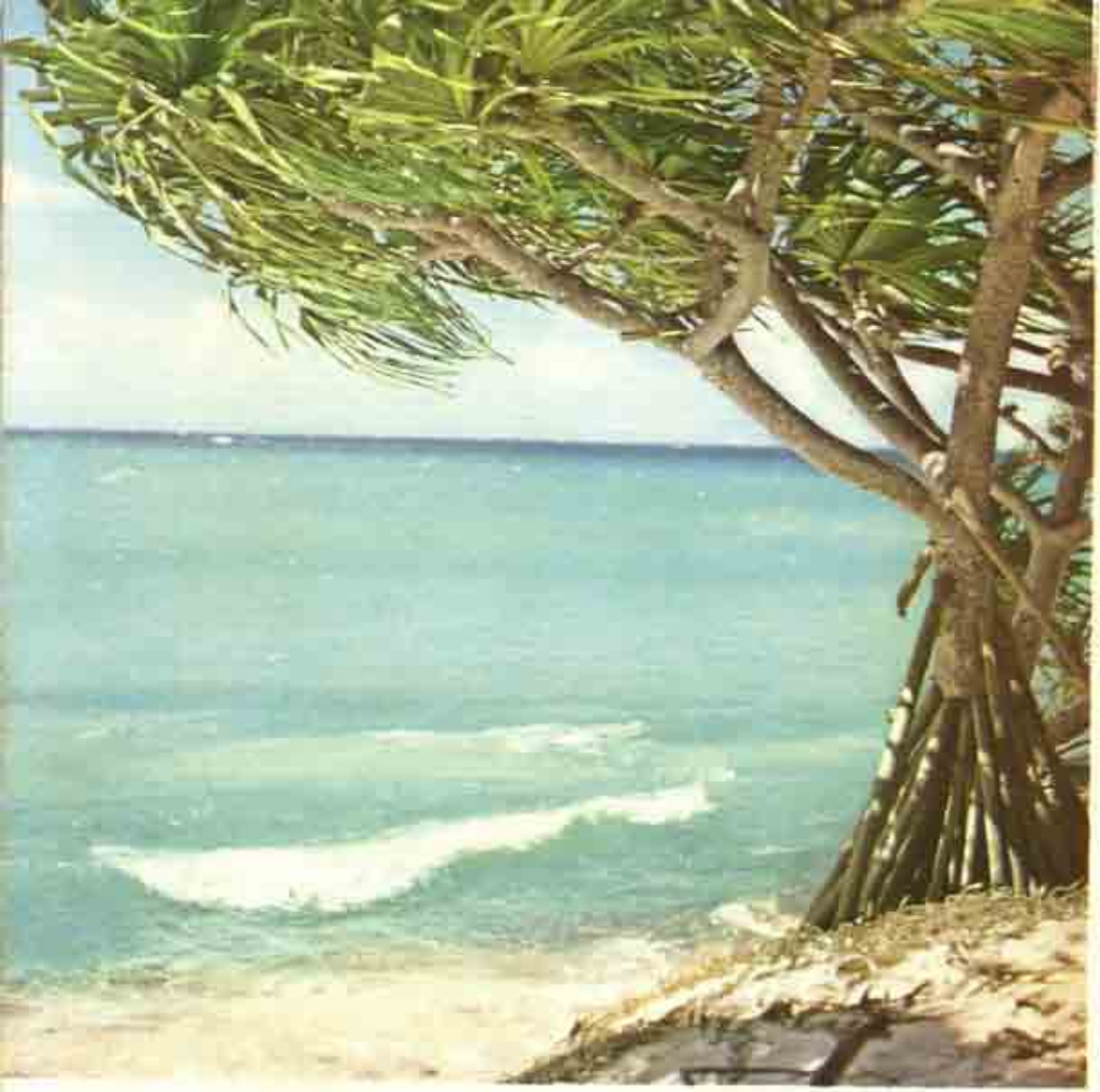
ABOVE: Monuments of eucalyptus wood on the Tiwis' island. The holes in the stumps are the dead man's windows, the projecting lump on the nearest monument is a symbol of fertility.

BELOW RIGHT: Appearances are deceitful — this warrior type, with his immense head, was as good-natured and friendly as the rest of the Tiwis.

BELOW, EXTREME RIGHT: Happy Cook, teacher at Sandy MacKay's school at Snake Bay, having a few puffs at a cutty she has received as a prize. Her age? Fourteen.

ABOVE: The bird which is the signal for knocking off work. The piercing shriek of the giant kingfisher, laughing bird, kookaburra, laughing jackass — it has many names — is heard on the Australian wireless. This handsome bird is about the size of a grouse.





The waves roll in emerald-green over the coral reef outside the sea turtles' island, Heron Island, and the screw pine, Pandanus, stands firm against them with its stilt-like aerial roots.

concertina, projecting ears. But his eyes were friendly, lively, humorous, his fingers thin and brown with the nicotine of hand-rolled cigarettes.

While his three black housekeepers in blue and white flowered sun-suits were laying breakfast, Sandy showed me round the place and poured out a flood of English which at first I had difficulty in understanding. It was influenced by many years in the Far East, in New Guinea and out in the bush. He doubled up his lean body on a stool as the natives do, rolled cigarettes at express speed, and told me about himself. He was fifty-two, and had spent three years at Snake Bay. His family owned a cattle farm in a remote part of Arnhem Land in the Northern Territory, but as a partner in it he had never been happy. Schoolmastering among primitive people appealed to him more, and he was happy with his flock out here. He was continually breaking off his narrative to take a sip of rum. It was eight o'clock in the morning.

The three girls in the little kitchen were blacker than an over-exposed negative. Their hair lay all over their heads like thick fuzzy pelts, their noses were broad, their eyes large and black. They were schoolgirls whom Sandy was instructing in housekeeping. Eileen was lively, smiling and approachable, Rosemary plump and reserved, and Happy Cook—so named because her father had cooked for the soldiers in the war—was the most talkative. She had been in Sandy's school for three years and had now been promoted to pupil-teacher for the youngest children. She was now, at the age of thirteen, receiving a wage of eight shillings a week.

During breakfast people streamed past the low opening in Sandy's bungalow which served as a window. People were heard saying 'Good morning, Mr. MacKay,' but no one could be seen. I caught a glimpse of the men's long spears, and the women's gait suggested that they were carrying loads on their heads. I saw a child carried on the hip, dangling breasts, a back, but no faces.

They were on their way to Paul Ingram's house, where the day's work was allotted. The aim of those in charge of the inhabitants of Melville Island is to teach them to till the soil and work a saw-mill and to see that they stay on Melville Island and do not go over to Darwin, which has a very bad influence on the natives. There is no religious education, no one tries to change their view of life or their attitude towards civilization. Their diet is being improved: the 'beef plane' comes every fortnight. Food, which is called 'tucker', and tobacco (*nikki*) are provided by the State, and they have to submit to regular medical examination. The mortality figures have already fallen considerably.

THE SCHOOL FOR THE UNTEACHABLE

Sandy MacKay spoke enthusiastically of his school: he had never had pupils so grateful or so willing to learn. The Tiwi people had long been regarded as impossible to educate, and scientific pedagogues had been most sceptical about the attempts to organize teaching on the island. Sandy considered this idea absurd: he had shown that the view that the Australian aborigines were impossible to educate was simply due to the fact that no one had ever made any serious attempt to teach them anything.

The morning after I arrived on the island I was awakened by something which sounded like the trumpets of the Day of Judgment. There was a thundering noise which shook the corrugated iron wall-plates of Sandy's house. I got up and looked out. Outside the schoolhouse stood a group of children clapping their hands and singing, while in the midst of them two boys were dancing and throwing up clouds of dust. Another boy was sitting with his legs crossed and holding to his mouth a trumpet-like tube nearly six feet long, a *didjeridoo*. Beside him a comrade with two wooden pegs was drumming, beating time and marking the rhythm of the dance.

The school work on Melville Island begins every day with a warming up dance. The boys in the middle kicked out with their legs only and dug their heels into the ground, holding their arms slightly bent with the fore-fingers turned down. They went round in a circle inside the chorus, urged on by the dark, exciting deep-toned music of the *didjeridoo*.

The school is an airy galvanized iron house with a cement floor. In the shade of the projecting roof hang bark-cloth bags looking like bagpipes. When the pupils grow thirsty they put the pipes to their mouths and let cold water trickle down their throats. The two school-rooms have steel-tube furniture and blackboards. A deafening row goes on till the moment when Sandy appears.

'Good morning, children.'

'Good morning, teacher.'

There is complete silence in the room. After the exchange of good mornings Sandy goes round and asks each pupil how his or her parents are, if they have killed any big lizards, if the fishing has been good. The children answer clearly and explicitly.

Sandy possesses innate authority; the order in the school is exemplary and the children behave naturally. The teacher walks about the room smoking, and now and then offers the older pupils a cigarette. He showed them on a map where the foreign visitor came from and told them about my strange country where the trees were leafless for a great part of the year and the ground was covered with something like cold cotton. He

told them that mirrors lay over the lakes and that the children of the country played in the cold cotton and slid on the mirrors.

The Tiwi children's reading books are mostly about kangaroos, giant lizards, emus and honey ants. Happy Cook's class has an hour's rest in the middle of the day: they lie down on mats on the cement floor. The older children sing and play dancing games. I heard them sing a catch 'My hat has three edges' with great gusto and mastery of rhythm. The school lunch consists of a large mug of chocolate with milk and a thick slice of papaya, the fruit of the melon tree. As soon as they have finished their meal the sound of the *didjeridoo* is heard again. It is remarkable that they can perform such bodily feats in heat so great that the sun's rays cut like fiery knives and the air quivers with heat far in among the trees.

Sandy considered it impossible to learn the children's real names, so he had given them English names instead, such as Max, Stewart, Harrison, Patricia, Vienna, Alexandra. To keep the girls in the school he had had to marry them. In the ordinary way little girls are married as young as seven to some old man whom they then have to look after and feed.

The three housekeepers arrived at seven in the morning wearing loin-cloths. But inside Sandy's door stood a wardrobe containing sun-suits, always clean, and these they put on at once. The first household duty was to roll a table's length of cigarettes for Sandy. But they were not allowed to lick the paper together; he did that himself. He had taught the girls to cut out patterns and make their own clothes, and they worked his old Singer with real precision.

Sometimes the master came to lessons a couple of hours late, but that did not matter. The children looked after themselves, and even if it sounded as if they were pulling down the school-house, they never destroyed anything.

One morning I witnessed Sandy's late arrival. After the usual exchange of greetings he asked:

'Why do you think I'm so late today?'

The children replied in chorus:

'Because you drank too much rum last night!'

And when I looked through Evelyn's writing book I saw a letter which she had written to a boy friend in Darwin. It ended with the words 'and don't forget to send me some grog'.

Education can be carried on in many different ways, and I do not think that Sandy MacKay's is the worst. Most of the children have learnt English in record time. I had three boys with me as porters during my stay on the island, and we had no difficulty in understanding one another,

although their education covered only the three years in which Sandy's school had existed. And the finest thing of all was that under Sandy's care those polite, English-speaking, well brought up children had not lost a scrap of their easy harmony with the nature that surrounded them.

Walkabout With Tiwi Women

The people of Melville and Bathurst had lived for thousands of years in the belief that they were the only people on earth. On clear days they could sometimes make out the mainland of Australia, which they called 'the land of death'.

Several hundred years ago sails appeared on the horizon for the first time. The strangers were not white men; they were sailors from Macassar pearl-fishing and looking for sea cucumbers. They introduced the sailing boat—till then the Tiwis had had only fragile canoes—steel, cloth and probably also syphilis.

The first white visit was in the nature of an invasion. The fort which was built on the island over 150 years ago was meant to prevent the French from penetrating into a territory which the English already regarded as their own, but Fort Dundas was equally a defence against the aboriginal population. The inhabitants behaved with reserve and waited on events. The islands received English names after eminent persons in the Admiralty. But the fort was soon abandoned, and it was fifty years before the next wave of invasion followed. Then the natives' spears came whining through the air: they put up a stout resistance. A feeling of insecurity again compelled the whites to leave Melville Island. Nor had any gold been found there.

In 1895 Joe Cooper, called the Buffalo Hunter, landed on the islands. Cooper's first visit did little harm to the herds of buffalo; it was he and his companions who came off worst. His brother was killed, while he himself managed to get back to the mainland severely wounded. But he took four prisoners with him, and he treated them well. He learnt their language and married the *lubra* (woman) who had cared for his spear-wounds during his flight. Four years later he visited the island again. His four prisoners now established contact with the inhabitants, and Joe and his wife became king and queen of Melville Island. Thousands of buffalo hides were exported to the mainland. The Catholics were courageous enough to set up a mission on Bathurst Island, and the Australian authorities made both islands a native reserve.

An Australian anthropologist, Hart, who made a study of the islands in 1930, named the people Tiwi. He had found that the common name

for men and women, when they spoke of themselves, was 'tiwi'.

The Tiwis are considered to be the handsomest and most intelligent of all Australian aborigines. Handsome?—well, it is a vague term. The men are about six feet tall; many of them whiten themselves all over the body, some paint rectangular patterns on their chests. Their hair is tangled: many have splendid full beards, some red beards, which they adorn with yet another beard of red feathers. The women do not correspond exactly to our ideal of beauty, with their broad flat noses, their thick lips and their empty hanging breasts.

But they are quiet and friendly, and I readily agree that they are more intelligent than their kinsmen on the mainland. They also seemed to be healthy and without blemishes. I saw at Snake Bay no running eyes and noses full of yellow slime, which was a common sight in the reserves on the mainland.

The Tiwis preferred to keep to their native dishes, and I met with a new and extremely varied menu, including roots, turtle's eggs, giant lizards' flesh and honey ants an inch long.

Early one morning I joined a party of women who were going for a 'walkabout', or hunting expedition, to the rocks on the other side of the island, each with a metal pot in her hands. We went in single file, and the chattering women set off through a meadow full of pandanus palms, woollybutts, bloodwoods and eucalyptus. I had a feeling that I was bringing up the rear of a column of tropical Stone Age women; the steel hammers they carried were the only suggestion of modernity about them. We were to break off the oysters from the cliffs with these hammers.

Herons were already going about among the bare rocks exposed at low tide, snapping up oysters and crabs, but they were quickly chased away by the crowd of women who came along, tramping barefooted over the sharp stones. The pots were quickly filled, and I reckoned that Sandy and I would have a banquet that evening.

When the tide came flowing in the hunt was over. The women made a fire on the beach, rubbing sticks against one another in Stone Age fashion. Then they squatted down by the fire, each with a crab in her hand. They held the crabs over the fire by one claw and roasted them. Roast mangrove crab tastes of earth and mud, but is a delicacy nevertheless. The women's naturalness made my presence as much a matter of course as if I had been one of their own men. One of them looked like a pirate queen, with a fiery red strip of cloth over one eye. Another sat alone. She was painted white all over and had rows of bracelets on both arms. She took part in the feast only when one of the younger women fed her. I was told later that

she had just become a widow, and religious precepts forbid such a woman to eat with her own fingers.

After the meal they filled their pipes. They bored holes in the strongest crab's claw and put *nikki* into the wider end. Happy was the proud owner of a real pipe-bowl which she had got from Sandy. She was the only one I could converse with, but in the presence of the older village women she evidently became shy and would not use her knowledge of English. Moreover, she had to keep her eye on the little children, who had been allowed to accompany us and were rolling about in the sand. The boys were throwing fishing spears till the water's edge was a mass of froth. But they were not yet skilful enough to be able to catch any fish.

On our way home to the village the women caught sight of a long slender frilled lizard in flight up a pandanus trunk. They all gave a howl, dropped their pots and flung themselves upon the poor lizard with sticks in their hands. A moment later it lay in the grass stone-dead: it had not even been able to raise its great spiky collar in defence. The spikes were soft already, and the women were cheering and dancing. They lit another fire, drove a stick right through the lizard and roasted it over the fire. The grey armour crumpled in the heat. No thank you, not for me, I thought, and pretended to be going off to look for botanical specimens. But Happy Cook came after me, saying:

'Mr. Sven, you must have a taste! Tastes good. Nice food, nice tucker . . .'

The women had skinned the lizard and cut it into thin slices. I pulled myself together and had a taste, but it was the toughest piece of leather I have ever bitten. I could not swallow a morsel. The women, on the other hand, ate it with relish with their black stumps of teeth. They rolled the fragments together like cigars and let them slide down their throats without chewing them!

'*Boomboonee* tucker!' said Happy, showing her still perfect teeth in a smile. The expression might perhaps be translated 'jolly decent grub'.

No Tobacco, No Hallelujah!

One of the reasons why so many of the 200 Tiwis at Snake Bay—the whole population of Melville Island is estimated at a thousand—paint their bodies pale grey or ochre is that it signifies mourning. Mourning involves a number of taboos, called *pukamunni* in the Tiwi language. A widow or widower must be fed by some relation, the deceased person's name may not be mentioned, nor any word which recalls the name. It is always the husband who names newly born children, but if he dies the children are

given new names at once. The widow remarries without ceremony, sometimes the very same day. The village has appointed some man her husband, and it is his duty to give his step-children their new names. If a man is *pukamunni* he may not wash or shave or cut his hair. A widower may not return to his normal life until the village has held a *corroboree*, a feast which can often last a whole week. The *corroboree* drives away all evil spirits and so grief is forgotten.

The *corroboree* is held at the burial place. This is about a mile from the village and is the most beautiful and colourful place I saw on the island. The grave-stones consisted of enormous wooden sculptures, cut from a single piece. Some were twelve feet high, and round some graves five or six of these sculptures were set up. Some had openings in them like small church windows. The shape of others suggested reels of thread, while the tops of some were cut into two sharp upturned points. Max, one of the boys, declared that they represented the rainbow snake, the rainbow being a phenomenon of great symbolic significance in their religion.

All the sculptures were prettily painted in bright red and yellow, brown, black and white, the colours being made from rubble, the sap of trees, mangrove ash and other things. The *paurtaranga*, or totem poles, sometimes have patterns in which figures suggesting crocodiles or giant lizards can be made out. A good many sculptures wore caps on their heads, baskets plaited with strips of bark and caulked with wax. One of the boys climbed up and brought down one of these caps, thinking that I might take it away as a memento. When I protested, saying that perhaps the dead man would disapprove of it, the boy replied that it was so long since a corroboree had been held that it would not matter.

While I was photographing the burial place we were surprised by a whistling noise like that of an aeroplane. The air was full of sound: the boys sank down into the grass and lay with their faces to the earth. The noise came from two sea eagles, one chasing the other in a perpendicular dive. Their wings were folded and they fell like stones. The boys regarded the incident as a bad omen. One of them climbed up the smooth trunk like a squirrel and put the basket over the top of the sculpture like a pixie hood.

The Tiwis do not know the boomerang: they hunt with short wooden spears with many barbs. These spears are painted in bright colours and are so decorative that one has a feeling that they were not originally intended for hunting weapons. There are many kinds of game on the island, but a terribly heavy toll has been taken of it.

Unfortunately I never had an opportunity of taking part in a crocodile hunt. How exciting and dangerous it can be was proved by Larry's

experience (his name was Pankamormirri in his own language). He had harpooned a crocodile from his canoe, but the crocodile had thrashed against the boat and upset it, and Larry had fallen into the water. The monster bit off one of his legs. Larry reached the bank, stanched the flow of blood with clay and grass and tied the strips of skin together as best as he could. Then he paddled the three miles back to Snake Bay.

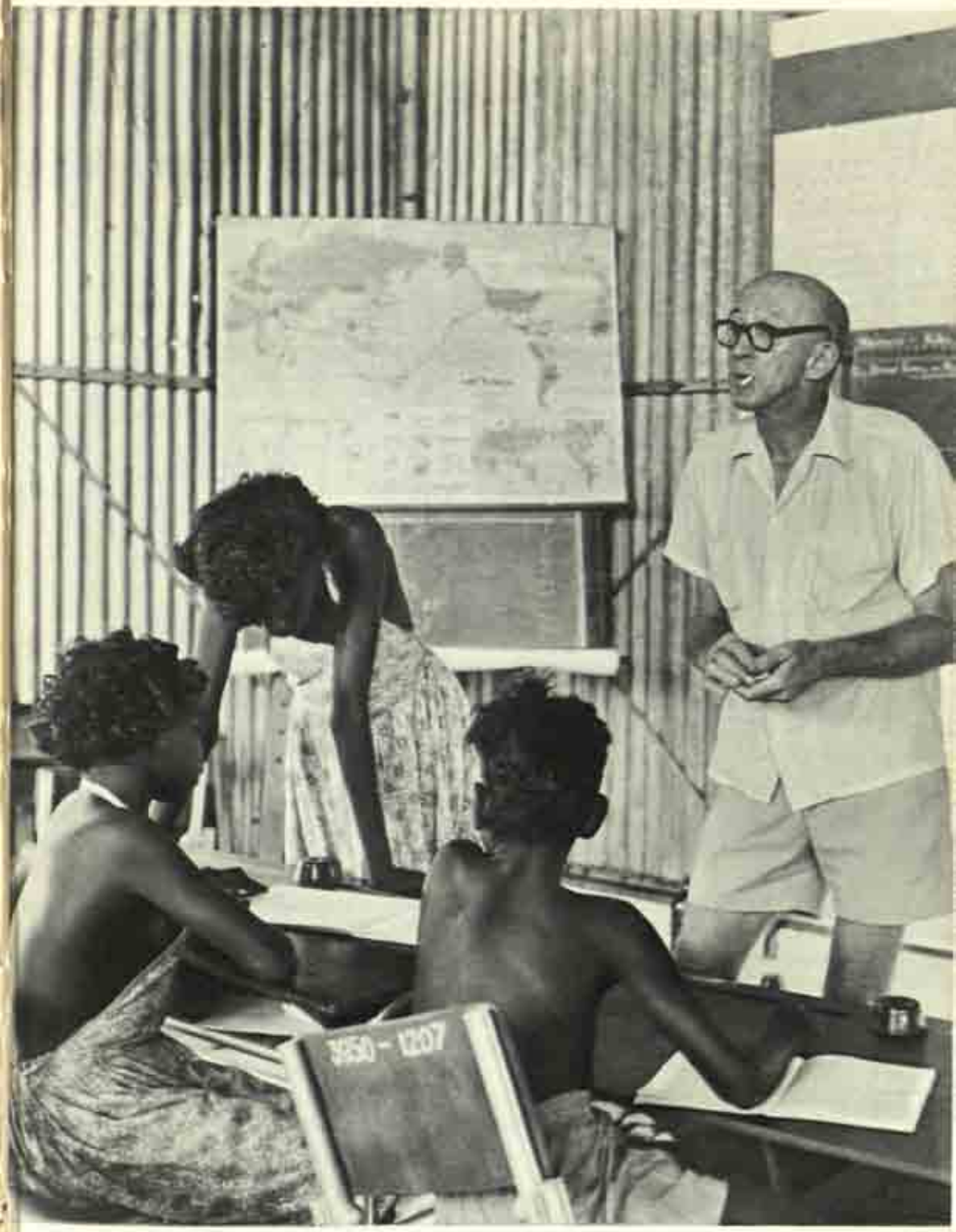
When I met him he had quite recovered, stumped across the island with his crutch or went over to church at the mission station on Bathurst Island. But this he did only when he needed tobacco. Although ritual and preaching are almost incomprehensible to a Tiwi, there may be certain advantages connected with church-going. But—no *nikki*, no hallelujah!

Everywhere men were sitting round the huts painting themselves. Some were looking at themselves in little pieces of mirror: the large white rings on the face must be accurately formed. Red stones were scraped to a powder which was mixed with water: white paint was stirred in turbid marsh water and produced a grease which was laid on in spots all over the body or so that it covered the skin altogether. A man named Roy Bigfoot was painting a yellow network pattern over his hips and thighs: another, when his work was completed, looked like a zebra. Round his neck he had hung a large ball of feathers on a string. An elderly man had painted his full beard bright red, and another had put on a loose beard of birds' feathers. Their hair was ornamented with bunches of feathers taken from the cockatoos. The women formed groups of their own, and some of them also were painted, by preference a dirty greyish-white colour.

So there was going to be a corroboree at Snake Bay. Two men were sitting on one side of an open place trying their instruments. One of them had two sticks to mark the rhythm with, the other was affectionately nursing his long didjeridoo. He pressed his thick lips to the mouthpiece and the didjeridoo droned out an overture. Some fifty men had now assembled. They clapped their hands and sang or yelled their songs.

Four men, each with a bundle of spears in his hand, emerged from the crowd and danced on to the open space, sending up clouds of dust. Their feet stamped on the ground, their knees were drawn up towards their chins, the spears whirled in the air. The spectators clapped themselves on the thighs with cupped hands and the singing reached a pitch of veritable ecstasy; the bellowing rose from depths unknown to a civilized man.

The dance was called *gerongapa yoii*, the crocodile dance. An unarmed man in a squatting position was the crocodile, and he was hunted by the other three. The paintings on the hunters' bodies shone out in the twilight. Sometimes they stretched out their arms as if trying to catch the tree-tops,



Sandy MacKay has done what scientists considered impossible: on Melville Island, off Darwin, he has taught the Tiwi children to read and write without seriously interfering with their way of life

Grief in black and white. The widow has painted her face white, the colour of grief, with pipeclay

'A canoe came drifting from the other side. I found it empty on the rocks. I call my friend, but he does not answer—the crocodile has got him!' So the song begins which accompanies *Gerongapa yoü*, the Crocodile Dance, on Melville Island

'He's dead, he's gone, but it can't be helped —the crocodile has got him!' Old and young listen with equal excitement to the song about the crocodile

still illumined by the last sunlight. The crocodile's jaws were opened wide to seize the spearmen: a few swift cuts and its tail was thrashing about in the death agony: the dance was over and a shout of triumph was raised.

The women did not take part in the dancing till it had become quite dark. Paul Ingram fetched a lamp which, helped by the moonlight, lit up the dancing floor. Soon the women's bodies were glistening with sweat and the greyish-white paint began to run off; their bare breasts swung in time with the rhythm set by the wooden sticks. Only the widow sat motionless on a stone, staring down at the ground and wringing her hands in despair. No one took any notice of her. In her black robe she was the embodiment of the deepest grief.

The dancing went on all night. Sometimes the singing was low and melancholy, and unaccompanied, but now and then it rose to fantastically high notes, like screaming rather than singing.

I left the Tiwis' island, Melville Island, with those songs echoing in my ears—and with the song which had been composed about Sandy MacKay, the first schoolmaster on the island, the man who drinks rum and marries all his girl pupils, who has thin legs and a clear skin . . .

This song was composed for love of a man who has regarded the 'unteachable' Australian negroes as fellow human beings and treated them as such.

CHAPTER 3

Living Fossils

My diary tells me that I sat waiting for Australia's queer animals for at least two months in all. Evening after evening, morning after morning, sometimes for a whole twenty-four hours on end I had to sit motionless to catch a glimpse of shy nocturnal creatures.

No animal photography is possible without great patience in the photographer. Tame animals seldom and wild animals never let themselves be ordered about by a camera man: he just has to wait till curiosity, hunger or mating instinct attracts them to a place where it is possible for him to get pictures of them.

This is especially true of the wild creatures of Australia. In no other continent has the fauna given rise to so many wild rumours, so many controversies and fantastic stories as in Australia. Animals which carry their young in a pouch on the abdomen, worms ten feet long, fish that breathe with lungs, mammals that lay eggs—it is not surprising that scientists at home in Europe, in the first decades after the discovery of the fifth continent, tore their hair and worried themselves half mad when they

were confronted with stories from Australia and animals' skins sent home by naturalists.

Today every schoolchild knows the explanation. Australia is the isolated continent, where old forms of animal life have survived, and into which the white man introduced the fauna of the other continents only two centuries ago. Australia is the continent of living fossils.

A Paradox Among Animals

When the first skin of a duck-billed platypus came to London 160 years ago it was considered to be a product of Chinese humour. The Chinese had played one or two tricks on zoologists already: they had 'crossed' monkeys and fish and called the result 'dried mermaid.' Why should this otter's skin with a duck's bill and a beaver's tail not be a fake too? Certainly strange animals often came from Australia, but this one was rather too much of a good thing. So nearly a century passed before natural historians began to pay serious attention to settlers' stories of the duck-billed beaver that laid eggs. Meanwhile the experts in London had wetted the skin to discover seams and to see if the bill was glued on.

When I saw the duck-bill for the first time swimming in a large glass tank, a *platypusarium*, in a nature reserve outside Melbourne, I was not at all surprised that the first rumours of its existence had been received with scepticism. And I was not the only one who was speechless: all those who see the creature are struck dumb with amazement.

The bill with its two holes looks as if it was sewn on. The skin suggests an otter's, with shiny stubbly hair. The short feet are webbed between the toes but are also equipped with strong claws. When the platypus is floating on the water it looks round with sharp eyes, but as soon as it dives its eyelids are lowered again. Thus it cannot see under the water, yet it catches all its food there, the bill acting as a kind of radar device. It eats worms, larvae, tadpoles, shrimps and crayfish, and it has a good appetite: it can consume half its own weight in twenty-four hours. It weighs about four and a half pounds, and the full-grown male, including the tail, is nearly two feet long.

I was seized with an irresistible desire to see and photograph the animal in its natural surroundings. People in Melbourne interested in animals thought it would not be impossible to see it: but photograph it—no. On that point I met with dubious head-shakings everywhere. One of the assistants at the Healesville nature reserve, Charles Tanner, a specialist in snakes, promised to help me to find the right waters. He maintained that the animal was by no means so rare as was imagined: that people so

seldom saw it was because it lay asleep in its burrow during daylight.

I spent many a rough evening on the banks of the Yarra river; many a rainy, misty morning too, all without result. But sitting still out in the open air is seldom quite uneventful. I became well acquainted with the little long-necked water tortoises which clambered in a leisurely manner along the shore. One lovely warm morning I had a visit from a blue-tongued lizard which had the impudence to sit down on my trouser-leg. When I threatened it with my ball-point pen it opened its jaws and hissed at me like a snake. A giant kingfisher laughed ironically, as if anticipating my failure. The lyre bird imitated the voices of other creatures.

One sunny morning I was sure that at last I had the platypus within range of my camera. Through my glasses I caught sight of a dark animal creeping up out of the water a couple of hundred yards down the sandy river. Some tree-trunks dammed the stream just there. With a thumping heart I crept and ran through the riverside scrub in a wide arc, and crawled for the last few yards, with my camera at the ready.

The animal seemed rather dark, but the size was right. I had misjudged the distance and had to work my way forward for another ten yards, taking care that not a leaf should crackle or a grass-stem sway. The animal was still sitting there, partly hidden by the branch of a tree, but it might move if I waited.

Now I could see it in detail, and I was no longer so sure. The body was too thick, the legs too thin and spread out. I was sure only when I caught sight of the long thin tail, whitish-grey at the tip. The beast which had deceived me was the gigantic Australian water vole, which reaches a length of about eighteen inches and is one of the continent's original mammals. It is vigorously hunted for its skin.

Long afterwards I made a last attempt to see the duck-billed platypus. I now had a tent, sleeping bag and provisions for a couple of days and nights, and I pitched my camp so high up that I could hear the roaring of the first falls in the mountains. On the first morning I squatted down behind some logs and through the curtains of young greenery I had a good view over the river. The morning had something of the atmosphere of the Swedish fells, with a wet cold mist pouring down from the wooded hills and with fallen tree-trunks lying across the slow-flowing water. But here there were also eucalyptus trees with the bark flaking off the white trunks, and dew glittering on the green canopy of the tree ferns.

There was a splash, and I listened and watched eagerly. It sounded like a fish, but I caught a glimpse of the characteristic beaver-like tail. The next splash came from the other side of the river, and this time I saw both the

duck's bill and the otter's skin. I began to get my camera ready, but the animal did not show itself again. It was impossible to make out the entrance to the day-hole. For one thing the distance was too great, for another the platypus makes the entrance so narrow that the water is squeezed out of its fur when it creeps in. It likes to be dry in its nest, which is lined with leaves and grass. The burrows can be as much as thirty yards long.

At four in the afternoon I was back in my place, and at a quarter past six I heard the first splash. Before the darkness fell I had witnessed a regular acrobatic performance. The platypus frolicked like an otter, with the water flying round it in clouds. From time to time it came up with a shrimp and played with it like a cat with a mouse. It shot across the river, and I could see it dredging the bottom with its sensitive bill. When it crawled up on to the bank it folded up its frogman's fins so as to be able to use its claws.

The male platypus is also equipped with a poison spur under the heel of each hind foot: in this respect it is unique among mammals. The poison spur is used in mating battles, and it has also been ascertained that it is used to kill any prey which the adult animal's toothless bill cannot deal with.

I followed my platypus with my eyes till the strain was too great, and listened to its splashing in the river till the rain drowned all other sounds.

One of the greatest authorities on the duck-billed platypus in the world, David Fleay, has devoted more than twenty-five years to the study of 'the most curious of all mammals'. In his zoological garden south of Brisbane in Queensland he has a platypus named Teddy, who has had the honour of being inspected by Queen Elizabeth and Prince Philip. Teddy does not appear, however, to have been impressed by his meeting with Royalty. Fleay is the only person who has been able to make the platypus breed in captivity, an event which created a sensation in the zoological world when it took place in 1943.

According to Fleay the platypus mates in September or October. The female lays from one to three soft-shelled eggs, which are placed in a bulge of the long burrow on the edge of the river. She sits on her eggs just like a hen, as long and as faithfully. But when the young are hatched they are mammals, which imbibe milk from almost invisible milk glands without nipples. The only animal which feeds its young in a similar way is the other monotreme, the echidna.

After about five months the young of the platypus seek their right element, the water, and seek food for themselves.

Mammal, bird, reptile (poison spur!)—is it strange that *Ornithorhynchus*

anatinus, the duck-billed platypus, has been called the missing link of the animal kingdom?

Ol' Man Kangaroo

It first appeared as a little black dot on the horizon: it grew and became larger and larger, till at last I could make out the grey fur of the animal's body. It bounded forward over the red sand: the powerful hind legs acted as smooth springs to propel its body forward and speed up its long jumps. It seemed barely to touch the ground, while its thick tail stood straight out like a balancing-pole. Up on the edge of the water-hole it stopped, sat down quietly on its camp-stool, its tail, and listened. The pretty deer-like ears worked like radar screens. They can be turned this way and that and intercept all sounds. Then it caught sight of me, but desert thirst makes the animals bold and at the water-hole armed neutrality is observed.

It was a female of the largest species of kangaroo, the great red. The male has red fur and is nine feet tall. This female, however, was considerably smaller and had woolly bluish-grey fur. Two round ears projected from the pouch, and a minute or two later the young one peeped out.The female was down by the water in two light bounds, bent down and drank. The baby had the whole of its head outside the pocket, but never reached down to the water.

After a few good draughts the kangaroo rose. Water was trickling from the corners of her mouth and running down her whitish chest. She dried herself with her stunted forelegs and stroked the drops off her whiskers. She looked over the desert in the evening light, as though expecting more thirsty visitors. Then she drank again and let nothing disturb her important business.

On my way home I met many kangaroos. They came either alone, flying forward with long, low bounds, or in groups, pottering along slowly in the hard sedge-like grass. They were all on their way to the water-hole. Some stopped for a moment, rose on their hind legs and then went on without taking any notice of me, while others made a slight detour, to keep out of my way.

The damage done by flocks of kangaroos is as annoying to the sheep farmers as is the injury to young trees by elks to Swedish timber-owners. In some districts fences many miles long have been put up round the grazing grounds—fences which must be at least nine feet high. But when hordes of a thousand animals come leaping along no fence will hold, and the flocks sweep across the pastures as effectively as swarms of locusts.

The kangaroo does not hold the world record for jumping: it can

hardly jump thirty feet and would be defeated in a competition by, for example, the African impala antelope. When the kangaroo is pursued it can attain a speed of forty or fifty miles an hour, but can only keep this up for a short distance.

For that matter, it does not depend on its ability to run fast, as, generally speaking, it has no enemies among animals. But man hunts the kangaroo by all means, legal and illegal: lorries are even used in order that as many animals as possible may be loaded into them in a single hunt. The dingo, the wild dog introduced by the first Australians, persecutes the kangaroo but does not always come off best. The kangaroo is admittedly stupid, but in a dangerous situation it can give proof of cunning. When it sees no chance of escaping from a pack of dingoes, a kangaroo may stop, back up against a rock, and give battle to the dogs at close quarters. It clasps the dingo with its small but muscular forelegs and rips up its belly with the sharp claws of its hind legs. In the circus 'ol' man kangaroo' has been trained as a boxer and set to fight regular matches, but, for safety's sake, only against other kangaroos!

A farmer of Swedish origin told me that he once had two of his sporting dogs drowned by an old grey buck kangaroo. The dogs had tired out the kangaroo, which finally had been compelled to go down into a river. It waited in the water for the dogs which came swimming after it and forced them down under the water with its forelegs till they were drowned. When the farmer reached the river the kangaroo was gone.

It was once thought that the young kangaroo was born in its mother's pouch and remained there until it was fully developed. Now it is known that the baby kangaroo comes into the world in exactly the same way as the young of other mammals, but that its further development takes place in the pouch. The foetus is born 'prematurely' and is no bigger than a walnut. The mother gives it a lick along the belly, and the infant kangaroo, whose forelegs are the best developed part of it, is able to claw its way up to the pouch and cling fast to the nipple. It is this interrupted development of the foetus that makes the kangaroo remarkable among animals.

The pouch has at first the same function as a cow's udder. In a few months' time it has become a nursery, to which the young kangaroo returns with a graceful bound when danger threatens or it becomes tired of walking on its own. But at the age of five or six months it can no longer be quite sure that it will be able to return. There have been occasions when a hunted kangaroo has thrown the young one out of its pouch so as to have a better chance of getting away. Then instinct tells the young one to hide at once in the nearest scrub.

THE MOST PHOTOGRAPHED ANIMAL

When we first met he was sitting up in a fork of a eucalyptus tree, a rough-coated grey creature, like a big teddy bear. He did not in the least mind my climbing the next tree: he only turned his head slowly, peered at me rather sleepily with his beady eyes, and went to sleep again.

Everyone calls him a bear, a pouched bear, though he has nothing in common with his supposed relation. He might just as well be called a monkey, and in fact the first settlers did so describe him. He snuffs and sleeps in his fork of a tree for days on end, and he behaves as if he only existed to be admired and gaped at. For that matter, nowadays that is all he has to do. . . .

The koala is a gourmet. There are 500 kinds of eucalyptus trees in Australia, but he will eat the leaves of only five of them: he will die if he cannot get just those. For this reason the koala has never been able to go abroad, although he would undeniably be the best ambassador of goodwill Australia could send out into the world.

In his native land, however, the koala is in every zoological garden, and willingly sits for amateur photographers' cameras. Millions of pictures of tourists holding a koala in their arms are distributed all over the world every year. In one place a whole-time photographer was appointed to take photographs of 'tourist with native bear'. He called himself 'Koala Jimmy', and he undoubtedly had koala on the brain. He had been working on the same subject for ten years, against the same background and with the same result . . . I did not envy my fellow photographer.

Naturally the harmless animal has been hunted ruthlessly. But not by the Australian aborigines, for they regard the koala as a creature in which the good spirits have taken up their abode. The white settlers only needed to climb into the tree where the koala was sitting and fetch him down, and the koala amiably flung his arms round his murderer's neck. During the years 1924-27 the number of koala skins exported was 2,600,000. When the Australians slowly realised that the koala had been almost exterminated the slaughter of the animal was forbidden, and today he is the most cherished and best guarded member of the Australian fauna. He has been given large reserves; whole islands are at his disposal, and huge areas are planted with his favourite trees every year so that he may thrive. Yet the koala increases in numbers slowly; the female has only one cub, rarely twins, and only gives birth every other year.

The largest koala reserve is called Phillip Island, and its scenery is more like a Danish dune landscape than anything. Meadows alternate with

grazing land for sheep and green copses. According to the custodian there must be at least 400 koalas in the woods.

In the evening the bundle of fur comes to life, rubs the sleepiness out of his eyes with his soft paws, inhales the good smell of fresh eucalyptus leaves with his black nose, and takes note of all the noises of the neighbourhood with his erect white ears. He puts his paws out straight, takes hold of a fork of the branch and stretches himself so that the woolly triangle of his chest shines white. His fur is thick for the warm climate of Australia, but as with most other animals on the continent his development has been retarded. Once upon a time the warm overcoat was necessary, when the koala was climbing about on the slopes of the Himalayas, before Australia was separated from the land mass of Asia.

When he has eaten a few armfuls of leaves he feels brave and utters a challenging grunt. He receives answers from many directions; other males cough and grunt to show that they too are virile. The mating noises of the males keep the night lively. They are in a hurry; they rush down from the trees, sending strips of bark flying, and tearing long rents in the trunks with their sharp claws. A solitary female takes refuge up a telephone pole; for the time being she wants to be free of suitors. She sits up on the pole all night and sleeps there the whole of the next day, too.

In the morning light a mother koala makes her way out along a swaying bough. The cub clings to her back, still a little afraid of the height. He was certainly safer in mother's pouch, so long as he was allowed to stay there. But when he was four months old he had to clear out and teach himself to eat. The female collects a bundle of leaves with one paw, pushes part of it over to the cub and eats the rest herself. In a little while the cub becomes thirsty, Then he moves over to his mother, sticks his head down into her pouch and sucks till his thirst is quenched. In the natives' language *koala* is said to mean 'I do not drink', which is consistent with the fact that the adult koala satisfies its need of liquid from the moisture in the leaves.

The female now finds it hard to resist the gurgling fits of coughing from one of the neighbouring trees. The cub has to look after himself for a while. She leaves him in a young tree and hastens down the trunk, till her tailless buttocks come with a bump to the ground. Then she hurries on to her tryst before even the kookaburra, the giant kingfisher, has started the morning's bird concert with its hollow braying laugh.

The Bird With Fifty Names

Kookaburra, laughing jackass, settlers' clock, googooburra, tarakook, kamminmalli, *wook-wook*—this bird has many names. It laughs its country

THE MOST PHOTOGRAPHED ANIMAL

When we first met he was sitting up in a fork of a eucalyptus tree, a rough-coated grey creature, like a big teddy bear. He did not in the least mind my climbing the next tree: he only turned his head slowly, peered at me rather sleepily with his beady eyes, and went to sleep again.

Everyone calls him a bear, a pouched bear, though he has nothing in common with his supposed relation. He might just as well be called a monkey, and in fact the first settlers did so describe him. He snuffs and sleeps in his fork of a tree for days on end, and he behaves as if he only existed to be admired and gaped at. For that matter, nowadays that is all he has to do. . . .

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into the air every day, for its call is the station signal for the Australian Broadcasting Corporation's transmissions, and it has at least fifty names. The natives have contributed most of them. One of the five ships of the Transatlantic Line carried its name over the oceans, and it adorns Australian stamps with its powerful beak and beautiful colours. And it is the most reliable alarum for all who settle and live in Australia.

The laughing jackass belongs to the gaily-coloured order of kingfishers, and its official name is giant kingfisher. It is the largest of its family and is independent of watercourses, for despite its name it does not fish. Lizards, snakes and young birds are its food. The bird itself need fear hardly anything but the owl—and possibly man. A bushman who is a bad riser may sometimes throw a shoe at the laughing jackass: it is hard to keep one's temper when the bird has disturbed one's night's rest. And the laughing jackass loves to sit on a post outside a house and let its irritating laugh ring out in the early morning silence. The noise is deafening.

There is no need to search for the kookaburra in the woods; it likes to accompany one on a walk. Our first meeting ended in a great triumph for the bird. I had gone into the woods before dawn with a box of mice. I meant to invite the kookaburra to breakfast in exchange for some good pictures. I sat leaning comfortably against an old gum tree, and the ground sloped down to a swampy bush meadow. I had placed the margarine box containing the mice beside me. It had already been observed.

Two laughing jackasses had settled on a branch above me, and both were laughing at once, with the loud stop out. My heart almost stopped beating, and the long-drawn mocking laughter made the mice creep together into the corner of the box. When I had recovered from the first shock I let a mouse out of the box. The birds were on it as quick as lightning: they dived groundwards and leaves and moss went flying. I could never make out which of them got the mouse: perhaps it was torn clean in half. The birds flew off, to about a stone's throw away, and perched side by side on a bough. Nothing was left of their prey.

After that it went better, but I had to throw the mice out some yards away to be able to take a photograph. At last one of the birds settled on a stump not far from me and posed. It held the mouse in its bill.

The bill is the most imposing feature of this bird, which is the size of a crow. Large poisonous snakes and lizards are utterly lost if the kookaburra gets them into its beak. The bird can as a rule kill any Australian snake except the various species of python. And the birds often hunt in pairs. The snake is killed by one kookaburra letting it fall on the ground and the other picking it up at once. This procedure is repeated until the snake is

dead. It is just because the kookaburra keeps the neighbourhood of the farm-houses free of snakes and lizards that the farmers overlook its impudent thieving of eggs and its disturbing nocturnal laughter.

I wonder all the same whether the kookaburra dares attack the spiny devil or Moloch lizard, a little creature which is not more than eight inches long but has a peculiarly daunting appearance. There are many strange creatures in the world, but hardly anything uglier than the Moloch lizard, to which science has given the name *Moloch horridus*.

I should certainly not have detected the lizard if the fox-terrier I had with me had not begun to bark furiously at a procession of ants which was crossing the sandy path. I had a look at the black ants and perceived the miniature monster. Its spiky tail pointed upwards in a bow, rather like a scorpion's, but with no poisonous sting. The body was stout and shot with brown and green, the head small but the jaws wide.

The lizard sat motionless. Now and again it opened its mouth and shot out its tongue towards the procession of ants. The ants were caught as on a stick of lime. Behind the spiny head there was a knobby erection which is said to have the same function as the camel's hump. The liquid the creature needs it takes up through its spines and stores in the hump.

I certainly did not mean to be brutal to the Moloch lizard, but to get a few good portraits of it I put the close-up attachment on to the camera and began to take photographs at a range of a few inches. The lizard paid no attention to me, but unfortunately it was much more sensitive than I thought. When I had made several exposures, the Moloch's tail sank dejectedly, and suddenly it was lying stone dead. I was in despair: never before had my camera caused any animal to die of heart failure. I sat there for a long time, hoping that the lizard would recover, that it had only been pretending to be dead, for a good many animals have recourse to that trick when in danger. But dead it was, and I trudged off with the corpse wrapped in a pocket-handkerchief.

Two Real Giants and a Sham Porcupine

Australia, the greater part of which is flat and desert country, has its own species of ostrich. Along with the kangaroo, it has the honour of adorning the national coat-of-arms. It is called the emu and it is hunted as energetically as the kangaroo, as it is considered to do great damage to the sheep pastures. Whole flocks have been mown down by a machine-gun, and if a shepherd finds a nest with eggs in it, he rides over it till all the eggs are crushed. Or else he takes the eggs to blow them at home and

spend long evenings painting Australian landscapes on the shells—they are popular tourist souvenirs.

The emu reminds one very much of its African relation the ostrich. It cannot fly, but in a race it would leave the ostrich far behind. A flock running with heads and necks lowered has reached 40 miles an hour, and an emu has kept ahead of a car driving at 30 miles an hour for seven miles.

The emu is certainly not more intelligent than the ostrich, and in any case the cock bird seems to be rather stupid. He lets himself be seduced by the hen (in which respect he does not appear to differ from other males). But he does take full responsibility for the offspring. Every year the hen bird pays court to a new cock, which has to sit on the eggs while the hen leads a merry life as a carefree grass widow. Sometimes, of course, he may turn sour and drive the hen away, having first torn off her greyish-brown plumes to serve as a mattress round the eggs. While sitting on the eggs he hardly ever leaves the simple nest, and after they have hatched he looks after the zebra-striped chicks and defends them vigorously if danger threatens. The emu is a good, indeed a unique father.

When the cock bird is sitting on the eggs he is bad-tempered and does not hesitate to knock a man over with his strong legs. Cases are known in which an emu has killed inquisitive children. The hen returns to the family when the chicks have grown a bit. I myself have suffered from the parent emus' rough treatment of intruders. Fortunately they did not have recourse to their worst weapon, the kick, but contented themselves with giving me a few good blows in the chest: ice hockey players might learn a lot from the emu. When I went too near the young birds the parents stamped vigorously on the ground and emphasized their displeasure with hoarse gurglings. I offered biscuits to show my friendly intentions, and the emu feasted on the unusual food with a supercilious air. As a rule the emu is not a fastidious feeder, but devours everything from grass and grasshoppers to old newspapers and film cartons.

I was also fortunate enough to see the other giant bird of Australia, the cassowary, which occurs only in the north-eastern part of the continent, on the Cape York peninsula, and in New Guinea. During a chance stay in the little town of Cairns, in Northern Queensland, I was invited by friends to go on a motor tour to the high plateau of the Atherton mountains. Thence there is a most wonderful view over rain forest, eucaplytus forest and cane sugar plantations, with far away to the east the Great Barrier Reef, as a breakwater against the blue rollers of the Pacific.

On one side of the almost round crater lake Eacham, fir trees, or something which looked like them, grew. This was the casuarina, or horse-tail

tree. The forest was park-like and well-kept, a pleasant place for a picnic. While my companions were making preparations for this I made a little tour round the black pool.

Where the casuarina trees ended a jungly rain forest area began. I had no jungle knife with me and it was almost impossible to make my way forward among moss-covered trees, lianas, prickly palms and rattan undergrowth. The tops of the trees were full of epiphytes.

After half an hour's walking I saw that it would take the whole day to go round the lake. My shirt was torn to fragments, my white Sunday shorts were soaked and brown with wet moss and earth, and blood was running down my legs. All the time I could hear the ripple of water from the lake and dared not go out of hearing of it: if I lost my way my friends would be given the unnecessary trouble of looking for me.

Suddenly something stamped on the ground close to me. A hissing throat-noise followed and a high-pitched prolonged belch. It sounded like the bubbling of a waste-pipe. The stamping was resumed, and then I got a sight of the creature.

The warning sounds came from a cassowary which was standing only six yards away from me and was probably as surprised as I was. I raised my camera quickly to my eye, and the bird did not move. It gazed at me confidently and inquisitively. Its long neck was light blue and had no feathers, the double chins under the powerful beak were shot with pink, and just where the feathers began hung a piece of skin shaped like a medallion, orange-coloured, like dry leather and the size of a postman's cap-badge. On its head, above the large black eyes, was a green helmet. In the dense vegetation it was impossible to take a full-length photograph of the great bird, and as soon as I lifted a foot it stamped on the ground, as decidedly and challengingly as a schoolmaster striking the desk with his stick. We fixed one another for several minutes.

Now it had to choose the moment for retreat. It said good-bye with a long series of hawks and disappeared. I dashed forward to the place where it had been standing and saw it clearing a way for itself through the brushwood with long strides. The black threadlike feathers swung to and fro at each step.

Bobby was a schoolboy, but he was also one of the best students of nature I have been privileged to know. We had become acquainted after a film show in the Swedish seamen's church in Melbourne, and we often wandered out into the woods, where he always moved silently and quietly. But one day he could not restrain his excitement.

'Look, look! there's a porcupine!' he stammered, so loud that he could have been heard a long way off, after which he squatted down at once, blushing with shame, behind some rotten stumps.

The creature Bobby thought was a porcupine, and which in the hurry of the moment I confused with a hedgehog, disappeared under a heap of leaves. Although we rooted through the whole heap we could not find the animal again. We were puzzled. It had not moved so quickly that we could not have seen it when it made off. Then Bobby raked away every leaf while I kept watch. At last the boy went down on all fours and examined the ground. He suddenly pricked himself on some spines in a slight depression. The creature had literally sunk through the ground, a protective measure which from its very simplicity gave absolute security.

The echidna (*Echidna aculeata*), which we came upon during our walk on the slopes of Donna Buang, a mountain nearly 5,000 ft. high, has nothing in common with the porcupine and hedgehog except its spines. The animal is a curiosity of the same class as the duck-billed platypus and like it is one of the monotremes.

Bobby and I sat down quietly on a tree-trunk to wait for the echidna: the wind was blowing in our direction and the animal would certainly come up to the surface of the ground again if only we had patience. The distance between us and the depression was barely ten yards. Bobby had not come across an echidna before on his rambles, and his freckled face shone with excitement. A kookaburra had detected us and lifted its bill in the air; its warning bray echoed through the woods.

Bobby had his nose in a book, and it said that the echidna is regarded as a mammal although it lays eggs. But it does not give milk like other mammals. The female has no nipples and the young one sucks the milk through pores in the mother's skin. The pouch only exists during the time of egg-laying and the first weeks after hatching, as the only egg matures there. When the young one has been placed in a well-protected, simple nest under a clump of grass or a stump, the pouch disappears. The young one stays in the nest till its hair and spines have grown, when its mother abandons it. The echidna hibernates during the winter.

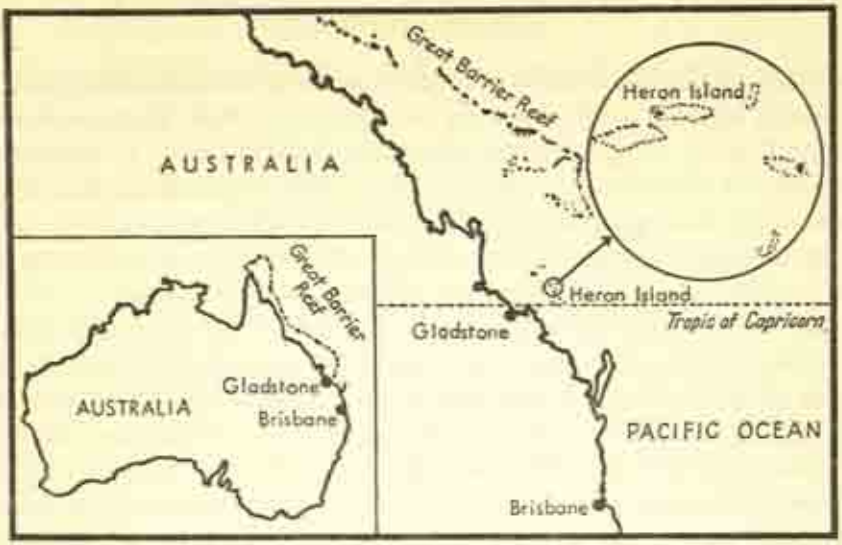
An hour passed without a sign of life in the depression in front of us. The next hour was enlivened by twelve cockatoos, which settled in a torraka and sat there squabbling. Three hours, four hours—and Bobby began to grow impatient and whispered that we could carry the echidna home in his haversack; then I could take my photographs in more comfortable conditions. But I was obstinate: it was hardly likely that the chance I now had would ever recur.

When Bobby had slept for some time and I was stiff from sitting, spines suddenly began to rise from the depression in the ground. They rose slowly and cautiously: then a long narrow nose, with the two large moist nostrils right out at the end of it, became visible, sniffing and snuffling. At last the whole bundle of spines had come up out of the depression and two little eyes were peering at the surroundings. The echidna was surprisingly like our hedgehog in its behaviour, and not very much larger.

The animal stole off downhill, while Bobby and I crept after it at a safe distance. Now and again it stopped and sniffed, poked among the roots of trees, stuck its nose into heaps of leaves and bored passages through them. The long claws of its hind feet were turned outwards and backwards, so that the creature seemed to be walking on its heels.

We followed the echidna till dusk, and it never discovered our presence, although we were sometimes quite near it. Just as we were going to leave, it turned off its course sharply and began to move faster. It had scented an anthill. It raked with its clawless forelegs in the soft mould at the edge of the hill and licked up one batch of ants after another. Its tongue was long and narrow. I crept towards the anthill from the opposite direction and succeeded in getting a few close-ups of the animal before it detected me. But when it did, it vanished into the anthill at once, so that fir-needles and earth flew up and only a little hole showed that it had been there but a moment ago.

Its sudden disappearance seemed to me symbolic. Several of Australia's queer animals appeared suddenly, about a couple of hundred years ago, and created bewilderment among zoologists. And now an Australian schoolboy and I had seen, for the second time on the same day, one of the strangest of all animals, one of the living fossils, sink down into the earth in fear of the humans who had had such a short time to study animal life on the fifth continent.



CHAPTER 4

Overcrowding on Heron Island

Something plumped down on to my bed. I woke with a start and sat up, straight and motionless. Was I dreaming? Had a snake tumbled from the roof? I had been assured that there were no poisonous snakes on this little island.

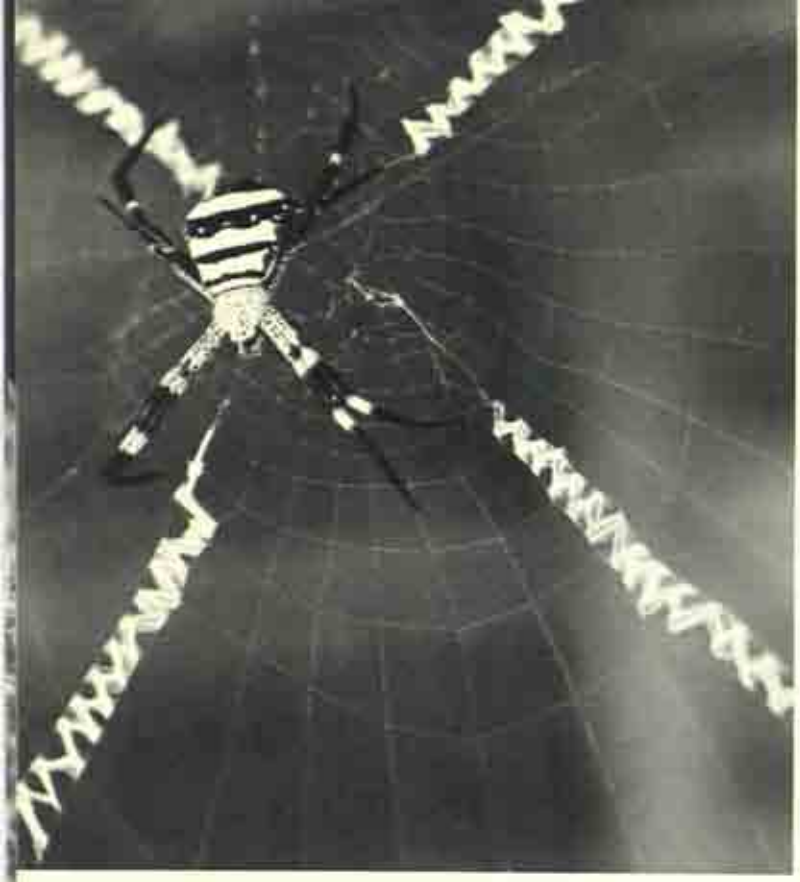
Everything was quiet, but a weight still rested on the blanket: I felt warmth beginning to come through it and grew numb with terror. Just when I was on the point of shrieking I began to recover from the shock, and grasped the electric torch which lay on the bed-table.

A dark chocolate-brown bird as big as a duck was lying on the blanket and pressing it down, as if it had been sitting on eggs, and staring right into the light of the electric torch as though dazzled. It did not seem at all frightened: it offered no resistance when I took it up in my hands. Slowly and gently I stroked its silky feathers. The bill was as long as a merganser's, reddish and powerful and ending in a considerable hook. Outside the window an army of thousands of birds was screaming. It sounded as though they were discussing the storming of the hut to rescue their vanished comrade.

Above: The echidna lays only one egg, which matures in its pouch. When the egg has hatched the baby sucks milk from its mother's nipples, but after the spines have begun to grow it has to look after itself. Thus the creature is a paradox: an egg-laying mammal which is also a marsupial during a short period of its existence

Overleaf: The chicks of the emu, Australia's ostrich, are safe in the shelter of their parents' legs, which have the kicking power of a horse

Above: A miss! The crayfish has escaped the swimming duck-billed platypus, which has the lids over its eyes in the water and finds its way by means of its sensitive bill



The St. Andrew's spider has both its legs and the reinforcements of its web in the form of a St. Andrew's cross

The spiny devil, the moloch, deserves its name, but this harmless creature was the only one which could not endure the sound of my camera shutter. It died on the spot!

I laid my involuntary bedfellow down at the foot of the bed. I had established that it was a mutton bird. It lay there till about three in the morning, when it began to complain and wanted to go out. It was getting-up time for the mutton birds. They belong to the shearwater family: they fly out over the sea at dawn and skim the wave-tops all day, hunting for fish. They spend the nights in holes in the ground on the coral islands in the Great Barrier Reef.

Marriage Among the Terns

One of the islands is called Heron Island, and it was during my visit to it that the harmless nocturnal visitor nearly frightened me into fits. It had been a seven-hours' trip over open sea from the town of Gladstone on the mainland to the first coral reef in the Great Barrier Reef, north-eastern Australia's immense breakwater, 1,250 miles long, against the part of the Pacific which is called the Coral Sea. The greenery of Masthead Island shimmered like a mirage far away in the haze. Dolphins played about our bows and accompanied us right out to the reef, where they turned off from our course and went out into deeper water.

Flying fish were sailing over the swell round Erskine Island. The tide had gone out, and the pandanus trees of the islands, screw palms, were now surrounded by a golden ring of sand. A flock of hundreds of terns—white-capped noddies—were fishing vigorously off Heron Island, but when the noise of our engine disturbed their proceedings they gave up fishing and flew in towards the island.

Heron Island lay well protected behind a wide coral reef: the turquoise blue of the water showed clearly how far the reef extended. The island itself was small enough to walk round in twenty minutes—a pleasant walk, as the shores were covered with fine, yellowish-white sand. I put up black and white reef herons, while snipe and gulls squatted boldly on the sand with their bills pointed into the wind. Down at the water's edge the sea washed in and out through countless crab-holes. There was a rattling in the stiff leaves of the pandanus trees, and the light greenery of the casuarinas waved like fishing lines hung up to dry.

The interior of the island had not the same friendly aspect. The ground was covered by a growth resembling Christmas roses, a good eighteen inches high, and under the mat which these flowers formed the going was treacherous. The sandy earth was completely undermined by the mutton birds' nesting holes and burrows: one sank into it up to the knees at every step. Under the tops of the pisonia trees guano rained down upon the intruder. The terns protested shrilly and used their most effective weapon

against the disturber of their peace. The trees were as crowded as a sky-scraper: I counted 150 nests in one tree. Still the birth-rate is low, for terns seldom lay more than one egg.

The species of tern called in English a white-capped noddy is the size of a pigeon and dark grey in colour, with, as the name indicates, a white cap. Its building habits are quite different from those of our terns. Just in front of me a pair were engaged in collecting leaves from the ground. They were carefully choosing withered and wet leaves, which stuck readily to the branch in which the nest was to be placed. They brought seaweed and grass from the shore, and the bottom of the nest was trodden firmly on to the branch and cemented with dung. In the centre of the nest a slight depression for the single egg is trodden.

Amorous preludes were taking place on another branch. Two pairs were courting vigorously and it was clear that mating would soon take place. One pair were pressing close against each other: the cock was caressing the hen's neck with his bill, bowing and bridling. The hen was laying her head now on one side, now on the other, as if in dumb admiration of her attentive cavalier.

The other cock had not yet succeeded in persuading his intended mate. He was going to and fro along the branch and singing a peculiar love song, which sounded sometimes like the croaking of a frog, sometimes like the chirping of a grasshopper. The song was astonishingly powerful for the size of the bird. At last the hen seemed to be giving way. The two began to sing a duet, a number of verses of which seemed to require that their heads should be pressed close together. Their bills were joined. I thought the cock had over-exerted himself when he suddenly threw up what he had in his crop. But this attention delighted the hen: the refined dinner with which he was thus regaling her was a token that they were to share each other's fortunes. While the hen ate the cock provided music with an air of pride.

Most of the nests seemed to be empty and abandoned, but when I climbed cautiously up into one of the brittle-boughed trees I could see the young birds lying flat in the bottom of the depression. They were hard to make out, their colour being almost exactly the same as the material of which the nest was made. Their parents were out at sea, fishing. Here and there a white egg shone: in some of the nests the hen was sitting.

The terns do not return from the sea till late in the afternoon. Then there is fighting for the nests: some birds cannot find their way, and then screaming and quarrelling begins. The hen expresses her pleasure at seeing her mate again by croaking and flapping her wings wildly. Everywhere

there is love-making and duels between rivals. Some birds take advantage of the general frenzy to steal building material from their neighbours, and if a thief is detected the whole colony goes mad. A pair of sea eagles are nesting on the island, and when they show themselves above the tree-tops the terns forget all their quarrels and rise into the sky in a dark-grey mass. They chase the eagles away, and the comments afterwards remind one strongly of those heard in the changing room after a football match —from the winning side.

Noisy Mutton Birds

The next wave of bird invaders comes in the swiftly falling twilight. Tens of thousands of wavering silhouettes sweep in over Heron Island and turn to land. It is almost dark when the black masses plump down on the sand or on the carpet of Christmas roses. Some of them sway about in the trees as if they had lost their sight, and fall to the ground as though suffering from concussion. And as soon as they reach the ground they start their wailing concert which continues all night, deafeningly loud.

The army of mutton birds has come to the island to spend the night, to conduct its love affairs, to feed the hen which is sitting on the egg in the hole in the ground, to stuff more food into the overfed baby, or to repair burrows which have collapsed. They behave like idiots. It was not enough to have one of them in my bed: another—or it may have been a pair—tried to dig its way through the eternite wall of my bungalow.

The shrieking and wailing of the shearwaters can be as trying to a human as a cloud of buzzing midges, and sometimes I am obliged to go with an electric torch in hand and drive away the worst offenders. It has happened that I have come out to find twenty or thirty birds sitting in a clearing where two paths cross. Their mating urge was fierce, and the noise did not stop even when I turned the electric torch on them. The mutton birds mewed like cats, whined like little children, groaned and sighed like aged people. The cocks crept upon the hens with wings half open, and the down on their necks bristled up till it looked like a comb. But the hen bird left her companion as indifferently as the grey hen abandons her cavaliers in play. Then the cocks' crests fell, but their crying did not stop.

The mutton birds which have a hungry young one at home in the nest are clearly equipped with the same direction-finding instinct as the bat. However confusedly they came, swaying and tumbling down through the vegetation, I never saw them hesitate about their way to the hole in the sand. And they were in a hurry; if one stood in the way they pushed between one's legs. Sometimes they fell head first into some treacherous hole in the

path, but they rose again and pounded on. If any nesting hole had collapsed during the day, the cock or hen scratched out the opening again till the sand flew.

Not till four in the morning does the mutton birds' cacophony, reinforced by the noise of the terns, come to an end. Then hunger asserts itself, and everywhere dark birds steal noiselessly down to the shore. They keep to certain paths and tracks, which are trampled by thousands of birds' feet. The mutton birds cannot take flight on land without having a slight slope ahead of them. Down in the sand dunes, where the vegetation ends, they begin to flap their wings as if seeking for a bit of wind to help them. Then they get a start and as bees leave the hive the stream of mutton birds goes out over the sea. They fly close over the wave-tops. At each beat a wing brushes against a wave-top, and this is what gives their flight its oddly wavering aspect.

When the breeding season on Heron Island and other coral islands in the Great Barrier Reef is over, the mutton birds go out over the Pacific. Sometimes their long flights reach to the Behring Sea.

Natal Clinic in Murderous Surroundings

By day the coral reef is attractive because of its interesting animal life, but the most fascinating experiences are to be had there by night. Then the coral is a hunter, then the sea anemones' poisonous tentacles wave in brilliant colours in the light of the electric torch, then all the crabs of the reef come up out of the sand and out of their hiding-places among the stones.

And when the tide is at its highest great round shadows come in with the rollers towards the beach. Not swift shadows like those of the sting ray or shark, but slow and leisurely ones. In the last wave a head is seen, as large as a football, peering in every direction. The shadow glides cautiously up on to the sand. Two huge fins, an umbrella-shaped shell, and the turtle begins to drag itself inland.

The green sea turtle is a big fellow, weighing up to 550 lbs. Only the female crawls up out of the sea, and she comes ashore only twice a year, to lay eggs. She moves clumsily and unhandily in the sand, with a pause now and then. She drags herself up the slope of the beach and pushes with her back fins, but she cannot go more than two or three yards at a time: then she has to stop, puff and blow, and recuperate. Her tracks become wide paths: it looks as if an amphibious tank had advanced over the sand. Her short tail produces a dotted line in the middle of the track, for she dips her tail in the sand after each shove.

These tracks have been the cause of the sea turtle's near extermination. They betray its presence and the cause of its presence, and it is the green sea turtle that provides the ingredients for the gourmet's finest soup, real turtle soup. The female was watched for by hunters when she came ashore: they turned her over on her back, in which position she was quite helpless.

Thousands of turtles ended in the soup toureen, not least on Heron Island, where until a few years ago there was a factory which turned turtles into tinned food. The owner was a Dane named Poulsen. When production decreased he devoted himself to the tourist industry instead, and adorned his prospectuses with pictures of people riding sea turtles. When his output reached its maximum at the end of the 1920's, 25,000 tins of turtle soup were produced here annually, which would have led to the creature being exterminated, especially as most of the turtles were killed before they could lay their eggs. Since 1950 the killing of sea turtles has been prohibited throughout the huge area of the Great Barrier Reef.

The turtle I had seen come up out of the sea was now busy digging herself down into the sand. She was in company with at least 50 others. They all scratched themselves down with the help of all four fins to a depth of about fifteen inches, after which only the back fins worked, lifting one load of sand aside after another. One fin brought up a load of sand and scooped it aside, while the other went down into the hole. As the first fin went down again it swept aside the previous load, so that it should not run down into the hole again.

The sea turtle cannot see anything of her work: her head is almost entirely hidden under the sand. She often takes a rest: she sighs deeply and heavily. Her instinct tells her that the hole has to be about 18 inches deep and a foot wide. When the hole is finished she turns her back fins into a cupola over the hole and her tail. Gulls and herons may have an eye on her from behind, and it is impossible for her to know what is happening in her rear.

While digging she is easily irritated: if she is disturbed, or comes up against the root of a tree, she stops working at once. She either goes back to the sea or looks for a new place in which to lay her eggs. But when the first egg tumbles down into the hole she is absolutely quiet, entirely concentrated on the task of getting rid of all the eggs as quickly as possible.

It was at such a moment that I was rude enough to dig myself in with a shovel on a level with the sea turtle. The task of pushing away hundreds of pounds of sand made me drip with sweat and puff and blow as audibly as the turtle.

The first eggs tumble down into the hole at a rate of four or five a

minute. After a time the tempo is increased: the turtle forces out as many as ten eggs a minute, and sometimes batches of three eggs as large as ping-pong balls fall down at the same time over the pyramid at the bottom of the depression. The eggs are exactly the same size and perfectly round, and as white as ping-pong balls. This turtle laid 143 eggs in all. I could not help comparing her with one of our ordinary farm hens, which would probably have developed an inferiority complex for the rest of her life if she had been, as I was, a witness of this express laying. And yet my turtle was no record-breaker: a female turtle has been known to produce 200 eggs.

Simultaneously with the eggs a secretion is passed, which serves both to keep the collection of eggs together and to cement the sand round the hole. The turtle covers the depression very carefully: she packs the sand with the weight of her body, while the four fins scatter it about and remove all traces. When she hauls herself down towards the sea, after perhaps a stay of five hours ashore, her tracks show her feeling of relief: her tail now leaves behind it an unbroken line. She disappears with the ebbing tide. Perhaps she meets her mate out by the surf on the reef, and then they swim down to the bottom together to browse on the seaweeds and other growths which are their food. Nothing shows what has taken place in the sand under the pandanus and casuarina trees.

The green sea turtles' egg-laying period is between October and February, and during that time every hen goes twice ashore to lay. In theory, therefore, enormous numbers of young turtles ought to be hatched every year. But only about 50 per cent of the eggs are fertile, and only about five per cent of the young turtles reach maturity and grow large enough for tourists to ride on them. The rest have become food for herons, gulls and terns, while still quite young.

The time for which the birds keep a look-out is when the young ones leave the hole in the sand and hurry down to the sea. Crabs are waiting at the water's edge: they saw off the soft young turtles' necks with their sharp claws and suck their blood. Out on the reef sting rays, sharks and other fish are lying in wait for their prey, and the sea turtle's cannibal relations, the hawksbill and loggerhead turtles, take further toll of their number. The young ones which escape all these dangers live at first on fish spawn; not till later do they become vegetarians like their parents.

In the warm, slightly moist sand the turtles' eggs mature in from eight to ten weeks. One evening on Heron Island I had the experience of seeing the young turtles leave their deep holes in the sand.

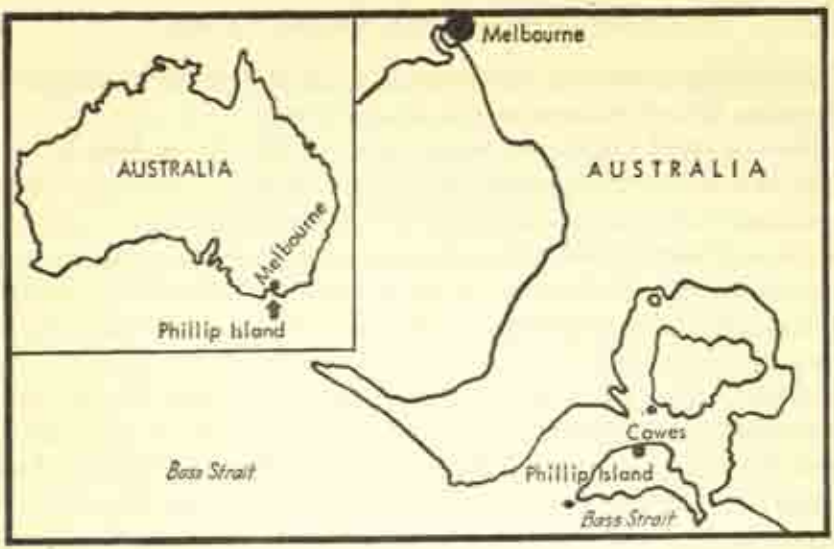
It was a clear starry night. The Southern Cross stood aslant over the horizon. I sat down on a sand dune under the inverted new moon of the

Tropic of Capricorn, and again waited for the black shadows to appear at high tide. The night breeze was cool and pleasant.

Then the sand beside me suddenly came to life. Active little shadows came swarming and struggling up out of it. A stream of newly-hatched young turtles was swiftly leaving the hole. They did not stop for a moment to get their bearings, but sped off in the right direction, towards the sea, away to their proper element. I knelt over the hole and counted: certainly seventy-five young ones came pouring up in the two hours during which the process went on.

When I picked them up they waved their velvety fins. The shields on their backs were still soft: they were hardly as large as the palm of one's hand, but lively and energetic. When I dropped them on to the sand they turned over in their excitement, but that did not matter. The mother is helpless on her back, but Nature has shown her usual foresight and given these little creatures the power to turn themselves the right way up again. They hurried on, away from all the dangers which they seemed to know threatened them from every side. When the mother digs the hole in the sand her eyes are closed: the sand lays itself over her eye-sockets like a mask. The young ones, on the contrary, are blind till they come up into the fresh air: then the lids that cover their round eyes are drawn aside. And no young turtles take the risk of clambering up out of their hiding-place before darkness has fallen over the island, and the enemies' chances of discovering their easy prey have been reduced.

I trudged bare-footed up to my bungalow in the early dawn. The screaming mutton birds had finished their nocturnal concert, and I met them in crowds along the path. At one corner the traffic was held up and the queue lengthened while two cock birds exchanged pecks over a hen. The others looked on in silence, reckoning, no doubt, on a speedy cooling of the lovers' ardour. Before day broke they would all have taken wing and be sweeping over the wave-tops in search of food.



CHAPTER 5

Solemn Dwarfs and Playful Giants

'It's dangerous to try to land on those seal rocks!' The woman journalist on the *Women's Weekly* in Melbourne sounded almost frightened. 'Our photographer gave up when his camera and stand were washed overboard in the breakers.'

'When all attempts to land by boat had failed, we tried by helicopter,' said the animal reporter Peter Dell at the TV station. 'And we came down all right by helicopter—but the rotor blades scared all the sea bears right out to sea. We've had all we want for the present.'

'Take a chance!' A natural history enthusiast in Elsternwick represented optimism. 'If it comes off, you'll have succeeded where everyone else has failed. And while you're waiting for the right weather you can have a look at the penguins on the Knobbies.'

Dwarfs in Their Sunday Best

It was the penguins which decided the matter. The information I had got about the seals on the rocks in these waters was vague, and it was only on five days in the year that a combination of wind, tide and swell

made it possible to land there. It would be expensive and a waste of time to wait for such a doubtful chance.

But I was unwilling to give up the idea that it might be possible after all. In the fishing port of Cowes out on Phillip Island, seventy miles south of Melbourne, I sought the fishermen's company in the bar on several afternoons. Our talk over the foaming beer glasses was all of the fur seals, the sea bears. No one would mind a boat trip out to the seal rocks, and if I had a good pair of glasses with me I should see plenty of seals. What would it cost? Well, all the fishermen were ready to make a trip round the rocks for £14 or £15. After a few more glasses of beer the offers were down to the level of a bargain basement sale or a friendly deal, say £7 or £10. But as soon as I uttered the word 'landing' there was a curious silence in the bar. Then came excuses and talk of the great risk involved, and suddenly they were all going out fishing and had no time for any pleasure trips.

Finally an independent fellow named Graham Aley and his wiry, weather-beaten father Bob Aley took my hook—without giving any guarantees. Our agreement was that they should have £8 and a bottle of whisky if we succeeded in getting ashore and coming back from the rocks. If they failed to put me ashore their pay would be £5.

'All right, we'll have a try,' said Graham. 'But we must get off early one morning. I'll knock on the window when we're to go.'

And I waited, day after day, night after night, with the penguins as my consolation. They are found on the south side of Phillip Island, where the storms have flung up white sand dunes among the rocks. They are not more than a couple of hand-breadths tall, but always dressed in their Sunday best, as penguins have to be. Beside the Emperor penguins of the Antarctica they would look rather like Sunday school children in skirts and knickerbockers among gentlemen in morning coats.

The dwarf penguins have dug their holes on the sloping beach a hundred yards inland, among the stiff rushy clumps of tall grass which have bound the sand together. Thousands of holes, large enough for rabbits, look out towards the water. At the far end of the tunnel, three feet deep, lie one or two overfed young penguins, waiting patiently all day for their parents to return in the evening with their daily catch of fish spawn and other small sea creatures.

The penguins fish as far as seventy miles from the coasts. They are very fast swimmers: the stunted wings have to help their legs to work up speed. They can dive and swim under water for a good thirty yards, and their shining blue-black backs make them hard to detect from above. But then

they shoot up to the surface like torpedoes to fill up with oxygen. When on the surface their white shirt-fronts make it difficult for sharks and other enemies to see them against the light surface of the water.

Every evening at twilight I waited for the penguins at the Knobbies. The birds which arrived first lay swinging to and fro with the wash of the sea like bunches of seaweed. More and more shining blue balls appeared, with sometimes a gleam from a white shirt-front: low quack-quacks, rather like gentle barking, were heard through the hiss of the swell.

But, as if at a given signal, a wave lifted up some thirty smartly dressed dwarfs, who lined up on the beach, chattered to one another, did some hasty make-up, flapped the salt water off with their wing-stumps and were then ready to obey the leader's order to march. I did not hear or see any sign of an order, but suddenly the little party was marching off up the beach. As in a well-rehearsed parade the white breasts swayed forward in line over the white sand.

Their bellies were so full that they trailed between the birds' legs: they could not hold their bodies upright. Then the whole party halted and the leader surveyed the terrain ahead of them, listening for unfamiliar noises. One or two of the birds seemed to have seen something suspicious, for they turned back towards the sea: but when they had gone only a few yards they turned back again, and the comical procession went on. At the grass barrier it extended quietly into a long line.

The hen who has been at home guarding the newly-hatched young birds receives her husband with a vigorous babbling and cheeping, as if eager to tell him at once what has happened during the day. And she is hungry. The cock has immediately to disgorge the greater part of the day's catch at the hen's feet, and the lightening and straightening of their bodies is noticeable.

A fortnight after hatching both parents go out fishing at daybreak, and in the evening they stuff their baby or babies full of food. After several weeks the young birds look like round balls in their thick covering of blue and white down. The most forward meet their parents on their way up the sand dunes and pursue the old birds, who do not think it seemly to feed their young just anywhere. But the young ones clutch at them and finally compel them to disgorge their food.

Soon all the young penguins have eaten their fill and drag themselves into their holes. The parents follow them: the whole family crowds into the sand tunnel and peace descends on the Knobbies, while only the everlasting surge breaks the silence of the night.

RIDE IT HIGH!

I slept badly every night: every morning I got up at three, and every morning the sea was raging at me as inopportunely as ever. Graham Aley could not go out fishing. But after I had waited a week the window-panes rattled with his knocking and I saw his grinning face out in the darkness.

'Let's go! But I suppose you've got your oilskins and your cameras are watertight? Insured too, I hope.'

The dinghy pitched slightly while we were rowing out to the fishing boat in the bay. The older Aley, Bob, was convinced that this was the right day for a landing on the seal rocks between the submerged reefs. The wind was from the right quarter and the tide suited us perfectly.

Graham told me that one morning he had caught sight of a swarm of bees up at the masthead. He thought of stopping fishing for that day: he did not want to have bees with him at sea. But he rowed a little nearer, and in the faint light of dawn he perceived that it was not a swarm of bees but a koala sitting up on the mast asleep. It had swum out to the boat during the night and no doubt thought that the mast was a new eucalyptus tree. The koala went fishing with him for a couple of days and did not seem to mind the change at all.

I was surprised that neither Bob nor Graham had any dislike of the fur seals, which had been protected on their rocks for several years. It is estimated that there are over 4,000 of them, and the fishermen are allowed to shoot only those which become entangled in their fishing gear. The sea bears devour 30 or 40 tons of fish every twenty-four hours, but Graham believed the experts' assurances that the seals live mainly on fish which are hardly suitable for human food, 'leather-jackets', parrot fish and others. Bob and Graham themselves had never been ashore on the seal rocks, so they were just as eager to go there as I was.

The sea was boiling in front of us, and the underwater reefs looked as if they were moving, trying to surround our boat. The waves broke up into foaming whirlpools. Seals' heads appeared close to our gunwale all round us. The seals flung themselves over the waves in long curves: the sea bears hooted like foghorns on the rocks. They dived down, a whole stream of them, into the surf which was flung up against the black rock walls. On the highest levels of the rocks old bulls stretched out their necks, moved their bodies from side to side uneasily and seemed to be preparing to defend their positions if we should venture ashore.

Bob was looking after the tiller and the motor: Graham threw overboard a couple of heavy drags. All necessary gear was put over the side into the dinghy. She was tossing like an eggshell alongside the motor-

boat and I looked questioningly at Graham, who nodded affirmatively. The noise from the breakers and the seals made conversation difficult.

Graham sat down at the oars, Bob stood in the stern with a spare oar, and I sat on a buoy with the cine camera ready for action. There was imminent danger of our hitting a submerged rock and capsizing or having the boat smashed up. The boiling masses of water swarmed with seals and more were sliding down from the ledges. Bob kept his eyes fixed on reefs, rocks and surge, measuring every wave as it came along. Suddenly he bellowed to Graham:

'Take it! Ride it high! Hoo!'

We felt a tremendous heave—the dinghy was lifted at least fifteen feet and went on at a terrific speed, the short oars whirling like the blades in a flax swingle. We certainly rode over a dozen seals as we glided into a narrow channel. When the wave drew back we were already a stone's throw up on dry land. The sweat was dripping from Graham's face. Bob laughed his deep laugh.

The first minutes on the seal rocks were rather nerve-racking. Hundreds of barking, bleating fur seals hurled themselves down into the water. Now the two fishermen told me for the first time that we could not stay on the bare rocks for more than an hour; it might begin to blow and the ebb-tide would make it impossible for us to get back to the motor-boat.

I loaded myself with the whole of the camera equipment and went away from the landing place. The two fishermen would have to stay with the boat and look after it. I paid no attention to their prophecies of evil. Certainly it would not be particularly pleasant to be kept there a month or two with a gale blowing and the seas washing the ledges, but now that I had at last managed to get ashore I was ready to take big risks.

Family Life on the Sea Bears' Rock

Almost everywhere on the rocks lay the stinking corpses of young seals which had died: seals' hairs covered the crevices in thick layers. The little earth and rubble there was was bare: I found only one little green herb, climbing along a perpendicular ledge. Otherwise there were only broken rocks and stone columns.

Half-grown young seals were lying asleep, with no idea of the sensation my arrival had caused on their citadel out in the sea. Uneasy mothers bleated like sheep when I could not help approaching some of the light-brown clumps and waking them. When aroused they gazed at me with their beautiful intelligent eyes: some, however, paid no attention to me at all, but shut their eyes and went off to sleep again.

Some of the young ones heard their mothers' anxious calls and hurried off across the rocks. But then they suddenly realized that they had seen something very queer and stopped short, sending a cloud of dust and seal's hairs flying round them. They turned their heads and looked round at the two-legged creature. Their surprise seemed absolutely genuine.

Behind some columns lay a great hairy beast in the ten-foot class, surrounded by his harem. His dark-brown fur bore the scars of violent mating battles with younger rivals. When he raised his head creases of fat lay about his neck like the rubber rings in Michelin's trade mark, and his moustaches hung down as thin as an old Korean's.

The smooth-haired cow seals lay in a circle round the bull, their newly bathed fur shining like silver. Their existence seemed quite carefree: they scratched their bellies from time to time, one of them stretched herself, yawned and brought her back fins together with a clap.

I had made my way forward unseen to a miniature fjord with narrow, steep rock walls, in which the swell rose and fell silently. There was a difference of many feet beyond high and low tide: green masses of seaweed fluttered in each wave like long rubber bands. When the surge rose above the edges a glittering waterfall streamed back and down into the depths. The sea bears came to the chasm alone, in pairs, or a mother with her calf, stood there for a time as if reflecting, and then dived gracefully into the water. Half a dozen seals were playing in the swell, tearing off strips of seaweed and lashing the water with them. They clambered up the rocks again with scrabbling fore-fins, and jumped in again as in a game of follow-my-leader.

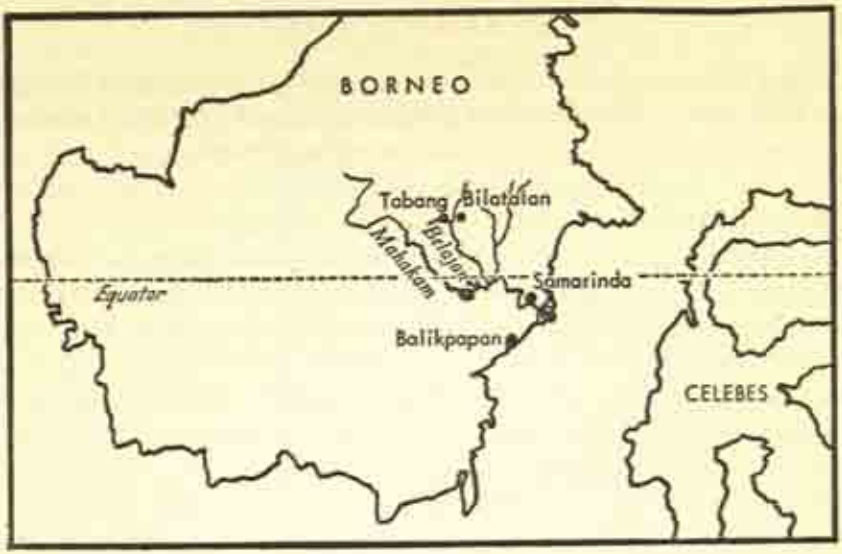
Hours passed, the whole sea bear colony gradually returned to its normal meditative life, and everywhere new animals slid up on to the sun-warmed rocks. But they could not hide their curiosity. If I just sat still they gradually came nearer and nearer to the camera. A scurfy old bull barked at me warningly and struck the rock so hard with his fore-fin that the whole neighbourhood looked round expectantly. Plump calves waddled about and stared wide-eyed at the strange figure with the queer buzzing apparatus.

In some places there was lively flirtation. The battles of the mating season were not so far away, and the young bulls took their chance of paying court as long and as much as they dared with the old bull close by. He paid no attention to them—so far. They could caress and play about with his cows, but woe to one who dared touch them when his passion was really roused!

After six hours' uninterrupted work my film was completed, and my

nose had had enough of the smell of corpses. No alarm signals had been heard from Bob and Graham. When I went back to the dinghy I had almost ceased to interest the sea bears. One or two might raise their heads and bellow, but they were no longer afraid.

We pushed off in the dinghy. Thousands of seals' necks were stretched skyward and a thundering chorus of hoarse fog-horns beset us. Was their bellowing a sign of relief, or were they disappointed at our having got into their impregnable Atlantic fortress and out of it again with whole skins?



CHAPTER 6

Daily Life among Dayaks

'Mr. Ambassador! It is a peculiar honour for Borneo and Balikpapan to be permitted to receive you . . .'

Two rows of white-clad men were drawn up all the way from the aircraft to the main building on the rough field which is the aerodrome of Balikpapan, the oil town in Eastern Borneo. The air hostess had opened the door and asked me to be the first passenger to descend.

The man who was making this high-flown speech was clad in a spotless white uniform with a number of gaily-coloured ribbons on his breast. He saluted when I appeared in the doorway, and all the rest came to attention. Was I getting in the way of some prominent person? I drew back hastily into the plane and turned to the air hostess in embarrassment, but she pointed to me and pushed me forward to the door again.

So there I stood, while the greeting in diplomatically courteous phrases continued. My soiled shirt, worn outside, and my unpressed shorts hardly gained distinction from the cameras and cases which dangled about me. I had not shaved for several days. The speaker was expressing his admiration for Sweden's prosperity and high standard of living.

At last the speech ended. Not till the handshaking and bowing was over, and I had walked between the two lines of men into the main building, was I able to suggest that there might be some mistake.

'I realized that at once,' the speaker replied, smiling. 'But we must keep up appearances for another two hours. For the people's sake.'

He did not think the incident at all painful. He had received a telegram from Jakarta in Java saying that the Swedish ambassador to Indonesia was to arrive at Balikpapan in Borneo, and as officer in charge of the aerodrome he considered it his duty to arrange at short notice a worthy reception for the diplomatic representative of a friendly nation. The ambassador had not come, but a Swedish photographer had arrived instead and was given a cordial reception in Borneo. It was all correct!

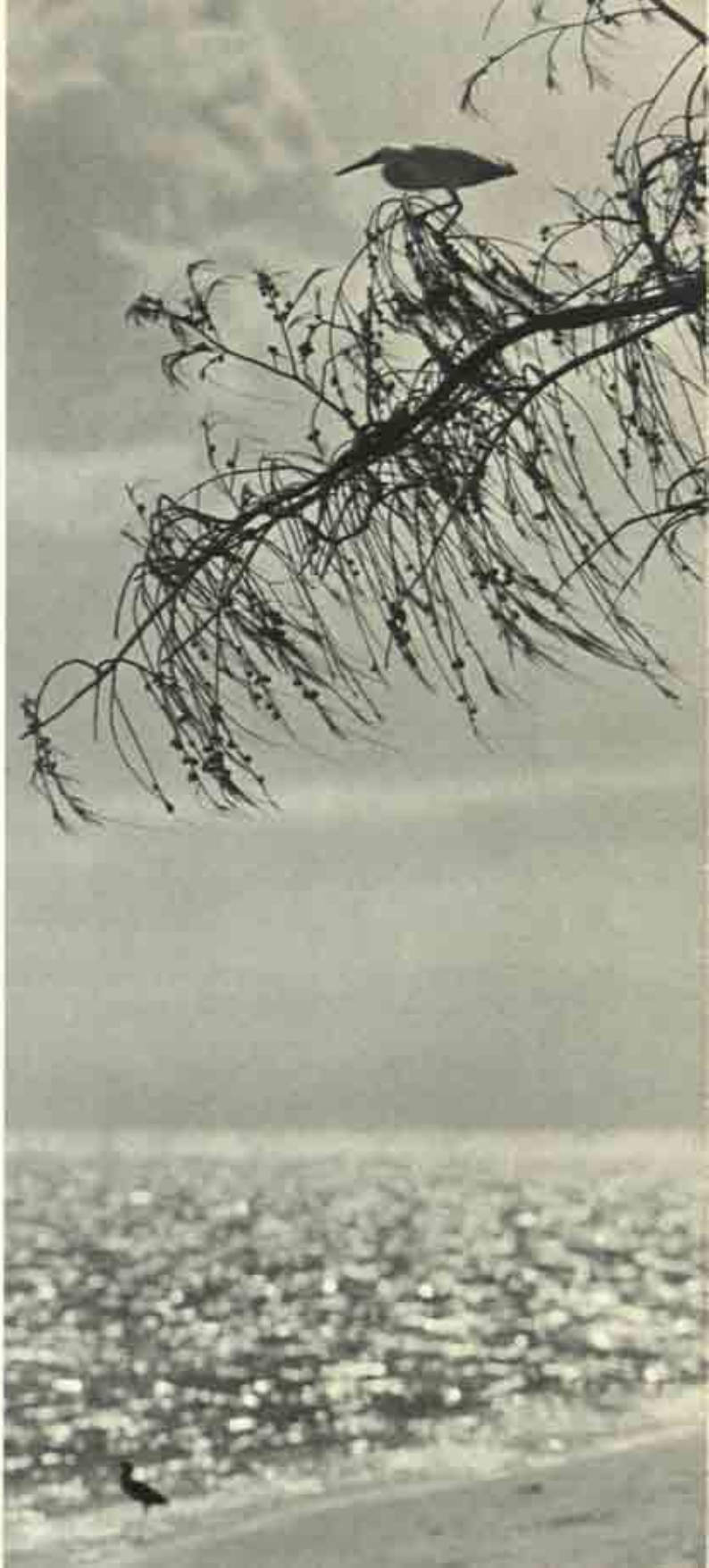
And indeed it was. I evaded customs examination and all the other formalities, I was placed in the city's smartest car with both a chauffeur and a courier, and my luggage was taken in a jeep. We rolled off through the dust to the town, with two policemen on motor-cycles ahead of us.

The only thing I really missed when I made my triumphal entry into Borneo was a photographer, or better still several photographers, to immortalize the scene.

National Day in Samarinda

Why had I come to Borneo? Mainly to visit the Dayaks. Over 200 different tribes live in Borneo, and the Malay word *dayak* is a comprehensive name for a number of the native peoples of the island. The town of Samarinda on the river Mahakam, which enters the sea through a wide delta rather south of the middle of the east coast of Borneo, would be an excellent starting point for a journey to the country of the Dayaks, untouched by civilization and missions. According to the map there was an oil road from Balikpapan to Samarinda. The information I had obtained in Java showed that I should reach Samarinda after a rewarding trip through the jungle of only one day, if the Indonesian Forest Service would place a jeep at my disposal.

The Forest Service had given me great help already. I now telephoned its representative in Balikpapan and told him that I had a letter of introduction and recommendations from the head office at Bogor in Java. A few minutes later three young men appeared, named Soemantri-Suemarta, Ijansjah and Sabana, and declared themselves ready to give me all the help I wanted. Their first action was to shatter all my hopes of getting to Samarinda by jeep. There was no road to Samarinda. It would be built some time in the future, and therefore it was marked on the map.



The reef heron looking out over the island which is named after him, Heron Island

Overleaf: 'White-capped noddy' is the queer name of these terns, which live in colonies and may here be seen in the pisonia trees

The only way to get to Samarinda was to go in a Chinese junk.

But I did not go by Chinese junk either. Next day I got a message saying that a Government tug would leave at 1 p.m. sharp. But throughout the Far East time is elastic. When the signal for departure was given at 5 p.m. nobody said a word about a late start.

I curled up in my sleeping bag on the after deck and was awakened early next morning by the sound of drums, and in my drowsy state I fancied for a moment that Samarinda was giving me an even more magnificent welcome than Balikpapan. But the reason for the drumming was that the national day of Indonesia was being celebrated. A festal procession was rolling along the main street by the riverside. It was headed by dancing girls with streamers and pennons in their hands. By means of a whistle a tall young Chinese was directing a crowd of boys carrying yellow and red flags, which they waved in time with the martial songs they were singing.

The cheering was particularly loud at the appearance of a number of young men of military age with wooden objects representing rifles and sub-machine guns on their shoulders and carrying streamers demanding the incorporation in Indonesia of West Irian, Dutch New Guinea. At the tail of the procession came a lorry with a huge cage on its deck. In the cage were two prisoners in grotesque masks, shaking the bars. They represented Papuans from New Guinea, groaning under the Dutch yoke.

I had all my luggage transported by cycle taxi from the boat to the guest-house, *pasangrahan*, where the head of the Samarinda saw-mill also lived. He was an old Dutchman named Hulsinga, courteous and kind. That my impression of his milieu might not be too bad, he hastened to tell me that his wife was coming out from Holland in the autumn, and by then a new house would be ready.

There was need of one: I found it hard to understand how he had been able to bear two years in that dirty hole of a guest-house. There were wide cracks in the floor. Big rats made a fearful noise in the attic at night. The bath-room was a tumble-down shed, the shower an old margarine tin: cockroaches ran round my feet when I poured water over myself. And I had to do that often, as the air was both hot and humid.

After dinner Hulsinga fed and attended to his dogs and then went for a walk round the saw-mill, which, with its galvanized iron roof shining like silver, was his pride. It had been erected with American aid and was ambitiously planned. Borneo's timber supply is almost inexhaustible, but it had not occurred to anyone that electric power did not exist in sufficient quantity to run a saw-mill on a large scale. Only a third part of the machinery was working, but Hulsinga was satisfied. The mistake in planning

was not his fault; more power stations would certainly be built as time went on. But then the supply of timber might not be sufficient: the felling was being carried on in a rather desultory manner. But 'sufficient unto the day is the evil thereof'. Hulsinga loved the tropics, and had lived in them long enough to have thoroughly adapted himself to their rhythm.

Electric Lamp in a Currentless Village

Slowly and sadly the days passed at Samarinda. The Forest Service had promised to take me on board one of their river boats, but no one could tell me when the boat would start. Every night, before I pulled the fusty blanket over me and pressed my 'Dutch wife' close to me, I offered a silent prayer for speedy departure. My 'Dutch wife' had come to mean a great deal to me in Borneo. Formerly I had looked askance at the little podge and sometimes thrown her on to the floor, but my love for her had blazed up during the humid nights at Samarinda. A 'Dutch wife' is a Dutch invention but has been given its name by the English: it is a hard sausage-shaped pillow which is placed between the legs at night so that the perspiration shall not become unbearable. When once one has grown accustomed to one's Dutch wife it is hard to do without her.

The rain was pouring down from lilac-coloured clouds when one of the boat's crew came running to tell me to hurry up. My seventeen packages, enveloped in plastic coverings, disappeared in the direction of the quay. My 65 lbs. of rice, my 20 lbs. of evil-smelling dried fish, my packets of cigarettes, must not be rained on. Nor must the 4 lbs. of salt which I had succeeded in collecting from the various Chinese shops. Salt is one of the most valuable things one can give the Dayaks, for there is a shortage of it throughout Eastern Borneo.

The motor-boat inspired confidence. There was a great crowd of people on board her, and all commented on the appearance and behaviour of the 'kodak man'. It had evidently been raining hard farther up the river. We navigated between large tree-trunks, dodged palms and floating grass islands. The torrential rain had washed away the banks in places, which gave the impression that small islands had gone sailing.

We went slowly upstream, with the supply lighter alongside us—and passed a few villages. But we did not stop even at the larger *kampongs* or at the Sultan's town of Tengarong. There I caught a glimpse through the rain and haze of the Sultan's white palace. The pleasure yacht lay moored at the landing stage, but it looked as if the paint was flaking off her. The Sultans were favoured by the Dutch and behaved like little kings, but they have now lost their power. After the liberation Indonesia abolished

the sultanates. This was perhaps not an entirely fortunate step, for many of the Sultans were highly educated men, kept order in their dominions and administered them more ably than the district commissioners of today.

The cook on board prepared food on a very shabby Primus cooker, grilled fish and prawns, cleaned little green sweet beans, split mussels, sliced onions and cut red and green chilis, red pepper, into little pieces with a strong bitter taste. The helmsman sat doubled up on a little bench in the smallest wheelhouse I ever saw, but he turned the brass wheel with a practised hand and never relaxed during his four hours' shift. The engineer greased and pumped unceasingly without ever going out into the fresh air. The rest of us, who had nothing to do, lay on deck in the most peculiar attitudes and listened to the twanging of a guitar or the tones of a simple flute. The heavy rain intensified the darkness: the searchlight never reached the banks.

After a time we left the Mahakam and entered its tributary, the Belajan, which had been made twice its normal size by the rain. From time to time we met huge timber rafts consisting of logs bound together with rattans, linked up to form a tow about a hundred yards long. In the middle of the raft was a palm-leaf hut for the crew, and at the stern a steersman with a gigantic oar. One of these rafts takes three weeks to reach Samarinda. It took me a week by the motor-boat to get to my destination marked on the map, the village of Tabang in the heart of Borneo. The river became shallower and the land on either side of it more and more uneven. The river turned into a series of long, narrow rapids, the vegetation became more fertile, with immensely tall trees and lianas which hung out over the water so that we seemed to be going through a tunnel.

The smoke of bonfires rose from the banks: a long row of landing-stages on piles appeared. Rough steps cut in a log led up the steep bank, the earth of which was bare and red. On the landing-stages stood kiosk-like sheds with square floors: these were used as bath-houses and lavatories. We had arrived at Tabang.

The headman in Tabang was a Kutainese—the region of the river Mahakam is called Kutai—and his name was Wedana Mas Suro: he was also district commissioner for the neighbouring jungle areas. He received me in his house, wearing a freshly ironed white shirt, a tie and a deep-black fez. His clerk served us with strong, floury coffee. The stout table was loaded with papers, an old typewriter and an Oriental counting machine, i.e. an abacus. But the principal ornament on the table was an electric lamp. There is no electric current in Tabang.

Mas Suro reigned over about 300 Kutainese, Bugainese and Chinese in Tabang itself and further had to exercise supervision over 1,500 Dayaks in the remoter parts of the jungle. I intended to stay in Tabang for a time, to get to know the country and the people, before I went on to the Dayaks. Mas Suro settled the question of accommodation at once:

'I have a house where a young Chinese is living. But we can turn him out. He hasn't paid any rent since some time last year: besides, he can just as well go home to his father, who is a business man.'

The house was in the village street, with a manioc garden in front of the door. It was a good house: the rain did not come in. The cook whom Mas Suro appointed obtained fresh eggs, good fish and excellent vegetables at moderate prices.

Primitive Harmony

My *rumah* (house) in Tabang was soon a centre for the whole population of the village. Dayaks too, who came to the village on business, made their way to the white foreigner's house: their curiosity overcame their shyness. And I soon found that one can live without cars and amortizations, that one can endure life without telephone gossip, legal bother and crosswords. Tabang had no psychological advisory office, no children's allowance, no health insurance. A woman's right to become a parson or a policeman was not discussed in Tabang.

But all the people in Tabang made the impression of being happy and harmonious, content with their lives. No one there was troubled with neuroses or stomach ulcers of nervous origin. Woman's duty was to be feminine, to bear and bring up children.

I know that such thoughts are blasphemous, that they make me a traitor to our western civilisation and culture. But this was what I thought at Tabang, and I too was content with my existence, among people whom we call underdeveloped and primitive.

There were four shops in the village, and three of them were Chinese. The stock of goods was not large. Salt, sugar, tea, soap, toothpaste, hair oil, saws, sarongs, paraffin and oil, cigarette papers (made of thin palm leaves) and black tobacco. A sewing machine, of which the villagers were immensely proud, belonged to a Kutainese woman who sewed *kabayas* (blouses) on it for the village beauties. A gramophone grated out Indonesian and Indian popular songs in the Bugainese trader's shop and attracted crowds of customers. A bicycle, the third and most remarkable of the machines in Tabang, of course belonged to Wedana Mas Suro and was for

him a mark of dignity and a symbol of power, which more often than not he pushed through the mud of the village street.

The news bureau, as was proper, lay in the centre of the town. A shouting, swaggering, incessantly laughing old woman was ready to give information about all that took place in the town. She sat like a dragon—an amiable dragon—at her large glassless window and made a note of everything that happened: nothing escaped her eyes and ears, and the bush telegraph functions quickly in the real bush as elsewhere.

A simple hut made of rough planks bore over its entrance the words PARTAI SOSIALIS INDONESIA RANTING TABANG. The information bureau of the Tabang district Socialist party was run by a Dayak woman squatting on the steps. In her ears she wore silver rings weighing from eight to twelve ounces. The lobes of her ears had been lengthened and were nearly four inches long.

The maker of gold teeth hired a room where he could, likewise the pedlar. The former took plaster or clay casts of gums and manufactured gold crowns, which were fitted on to the real tooth, from gold earrings, these being no longer fashionable.

At one end of the village street lay the school, where both the village children and the Dayak children were taught. Young Indonesia is making great efforts to teach as many children as possible to read and write: as late as 1941 only one in ten could do so, and only a small fraction of the population could speak Indonesian. But the shortage of teachers is still very great, and attendance at school out in the country has therefore to be voluntary. The thirst for knowledge is intense, and the two teachers in Tabang taught children during the day and adults in the evenings. There is a fearful lack of paper, and the slates in use are almost worn out.

There is no proper road system in Borneo, the third largest island in the world. Paths wind through marshes, over mountains and through clearings in the virgin forest. The rivers are the veins of the country, but unfortunately do not permit the passage of vessels of any size: the violent erosion makes the rivers progressively shallower and broader as one ascends the stream. The cultivated ground reaches to the river-banks, so that there are no trees and bushes to protect the banks from being scooped out and the earth from slipping away.

Motor-boats were rare in Tabang. Long, narrow, low canoes glided past the village every day, paddled by men in broad-brimmed, gaily coloured palm-leaf hats. Going upstream the canoes were punted, and kept close to the clayey bank. The river is capricious. Sometimes the water is so low that the canoes have to be hauled over the sandbanks, but during

the rainy periods the height of the river can increase from 25 to 30 feet, so that canoes disappear and whole plantations are washed away by the masses of water.

I was invited by some family to dinner, coffee or tea practically every day. When going to Kutainese and Bugainese I had to clamber up a ladder; when invited by Dayaks I had to walk precariously up the log steps. Everywhere I was begged to sit down on the golden yellow rattan carpet in the middle of the family circle. Their kindness was overwhelming, their hospitality boundless, and no excuses were made for simplicity. Here no one asked me to excuse untidiness, and no host emphasized that he had very little to offer. . . .

The rice steamed in a heap on fresh banana leaves, bowls filled with fish were offered round, sauces and burning strong spices circulated, likewise tapioca, maize cobs and green vegetables. We ate with our fingers. To begin with, cutlery used to be borrowed for me to use, but it disappeared when it was seen that I was delighted to eat like the others. Dinner was rounded off with bananas, mangoes or papayas, and was washed down with glasses of sweet tea. Afterwards they all waited for me to offer proper cigarettes. When smoke and satisfied belches rose to the roof of the hut, when the darkness of night fell over Tabang and the firelight illuminated friendly, laughing faces, I was willing to subscribe to my friend Eric Lundqvist's view that 'the savages are in the West'.

Large Family in Long House

The address was 'On the bank of the Podoho, Central Borneo': the house was in Bilatalan, and was owned by a Dayak 'collective' with between 150 and 200 members, all more or less related to one another.

Only the chief, Ari, allowed himself a smile when I arrived: the other men seemed uninterested and the women turned their backs. The children ran in and out through all the creaking doors, while crowds of skinny curs struck up a chorus of protesting howls.

The three Dayak canoes had drifted downstream from Tabang for a few miles to Belajan, after which they entered its tributary, the Podoho, and a strenuous paddling up this river began. The journey took a day, and we had seen from the river the roofs of a good many Dayak houses, which were always up on the high bank, a little way into the forest. This was virgin soil, to which the American missionary's influence had not extended, where the doors of the long house were not decorated with Uncle Sam's Christmas cards and where the Western ideas of sin and guilt had as yet made no impression on the native mind.

Ari's *lamin*, or long house, stood on posts a good six feet high. Two logs with steps cut in them led up to the covered verandah along the length of the house. Ari's own room measured 40 feet by 50, and the door was kept closed by a rattan switch with a heavy stone at one end. I did not know of this contraption, so that the door slammed to after me and I almost flew into the room over the high threshold. My clumsy entrance lightened the ceremonial atmosphere: men, women and children sniggered and laughed at me. I escaped the waste of time over formal introductions.

I never discovered exactly how many people there were in Ari's family. The place swarmed with people at all times of the day and night, and also with animals. When I tried to count the cats I never arrived at any figure less than nine. The dogs fought out in the verandah; about 50 shabby, scarred mongrels. The hens lived there too: they were allowed to run loose in the day-time and pick up what food there was, but every evening they were stuffed into rattan baskets. The cocks roosted on the roof. Black-and-white and black pigs lived under the house and spread an indescribable stench.

I was allotted a place in a corner beside the three sleeping stalls. I unpacked my luggage and spread the mosquito net over my camp bed. A slit in the wall let in the daylight: otherwise the hut was dark. Outside, in the living room of the hut, the men sat in a ring round the oil lamp and smoked my cigarettes with enjoyment. The only one who did not really like smoking was the old grandfather, but when he was offered something really good to smoke he could not help taking a few puffs, though it made him hawk and cough. He was the only one of the community who seemed poorly: all the other men were well-proportioned, with splendid physique. Certainly their teeth were black, but on that point I was deceived by the ideas of beauty I had brought with me from home. According to Dayak ideas only the beasts of prey of the jungle and dogs should have white teeth. If vigorous betel-chewing does not darken the teeth, the Dayaks blacken them with a stain.

Round the hearth sat the women. There was a faint jingling from the huge bunches of rings in their lengthened ear-lobes. In former times children too were adorned with these great tin rings, four inches in diameter. Only three days after a girl baby's birth holes were pierced in her ears with a sharp bamboo, a ring was put in and was soon followed by several more, till after a time a bunch of rings was dangling down to her shoulders, even down to her breast. But fashions change even in the Dayaks' country: today no young Dayak woman need find her chances

in the marriage market ruined if the weight of the rings has torn the skin of her ears. And nowadays very few girls have to carry the same heavy gewgaws as their mothers did.

A Burlesque Dance by Head-hunters

Most of the Dayaks in the *lamin* spent the day out in the cool covered verandah. The younger women stood there too, pounding rice. They pushed the rice down with their feet into the hollows in the bench they stood on, and soon the whole house began to shake with the bumping of the long sticks. An elderly woman gathered up the rice in a rattan bag and drove the fowls away with a bamboo stick. Another woman made baskets with practised fingers. They nearly all stopped what they were doing as soon as I appeared, but a tattooed man with wild pig's tusks in his pierced ears went on with his work without any embarrassment. He had just begun to plait a fish trap. He had made the first loop round one of his toes so as to be able to stretch the netting. He took the whole day to complete it.

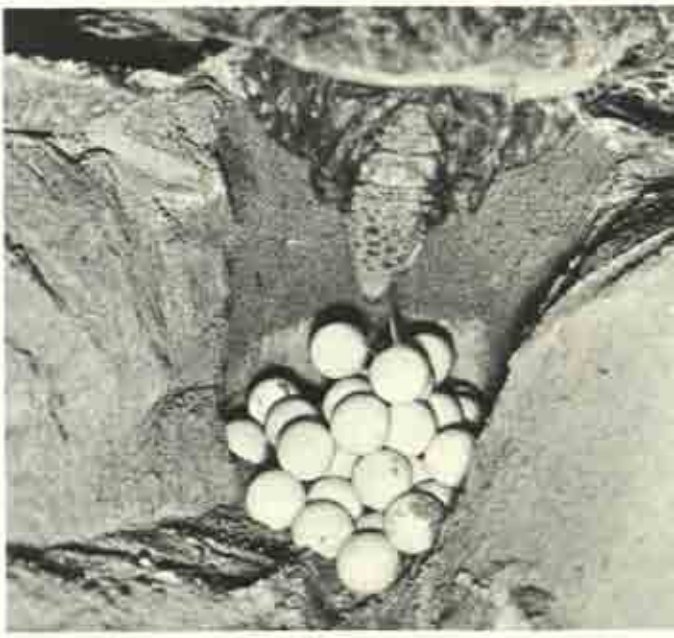
Some women were playing with pegs a game resembling poker. The dogs yelped, and the children played with polished stones which served as tops. One man was carving a boat out of a tree-trunk: at short intervals he took five minutes off, rolled a cigarette and lay down to rest under the coconut palm by which the new canoe was being made.

The chief Ari had worked for the Dutch in his youth and had learnt enough of the language for us to be able to understand each other fairly well. One day he told me that there would be dancing for me, for *tuan*, the same evening.

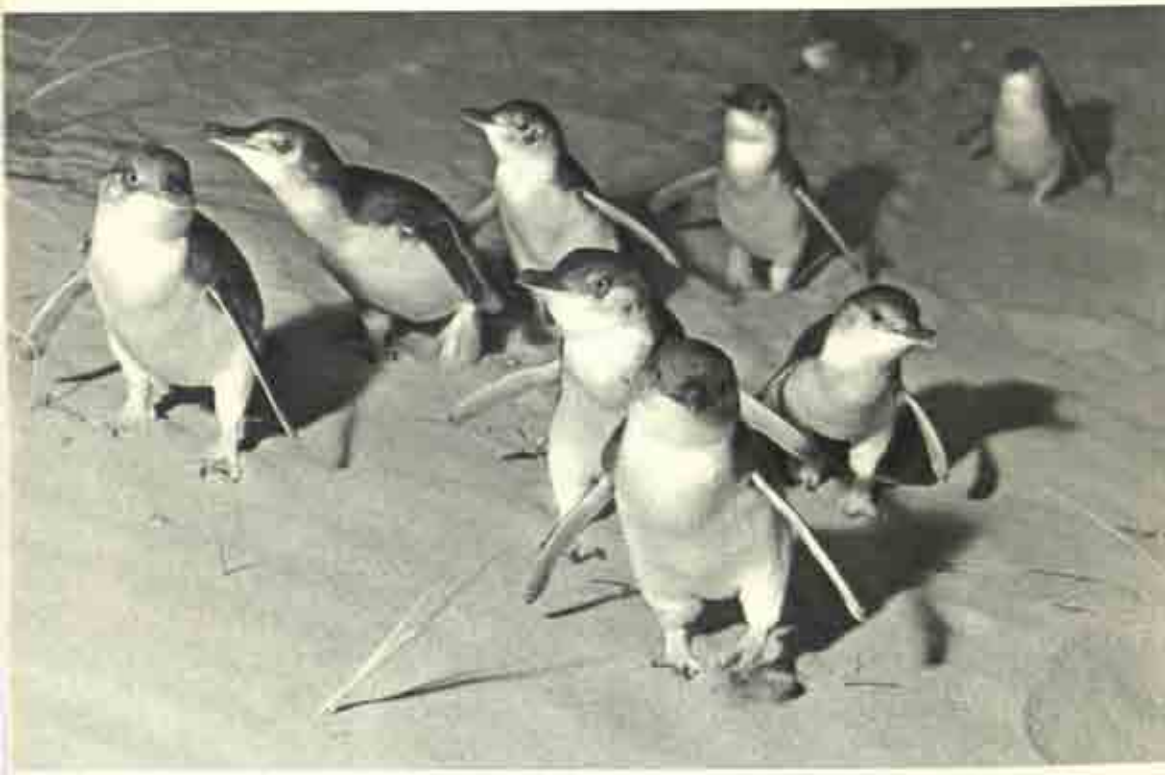
In the twilight two men began to practise the simple dance tunes on the stringed instrument called a *sapé*. From the rafters of the verandah hung a war drum six feet long, carved wooden figures representing spirits, and the skulls of wild pigs. On the outer side of the wall were bundles of scalps, concealed by dried palm leaves.

So I was in the head-hunters' land—and certainly the epithet head-hunters will be applied to the Dayaks of Borneo for generations to come. Were they dangerous, then, those genial, hospitable people who were now arranging a dance in my honour? That evening, when I saw their eagerness to give me—and themselves—pleasure, the idea seemed to be utterly absurd.

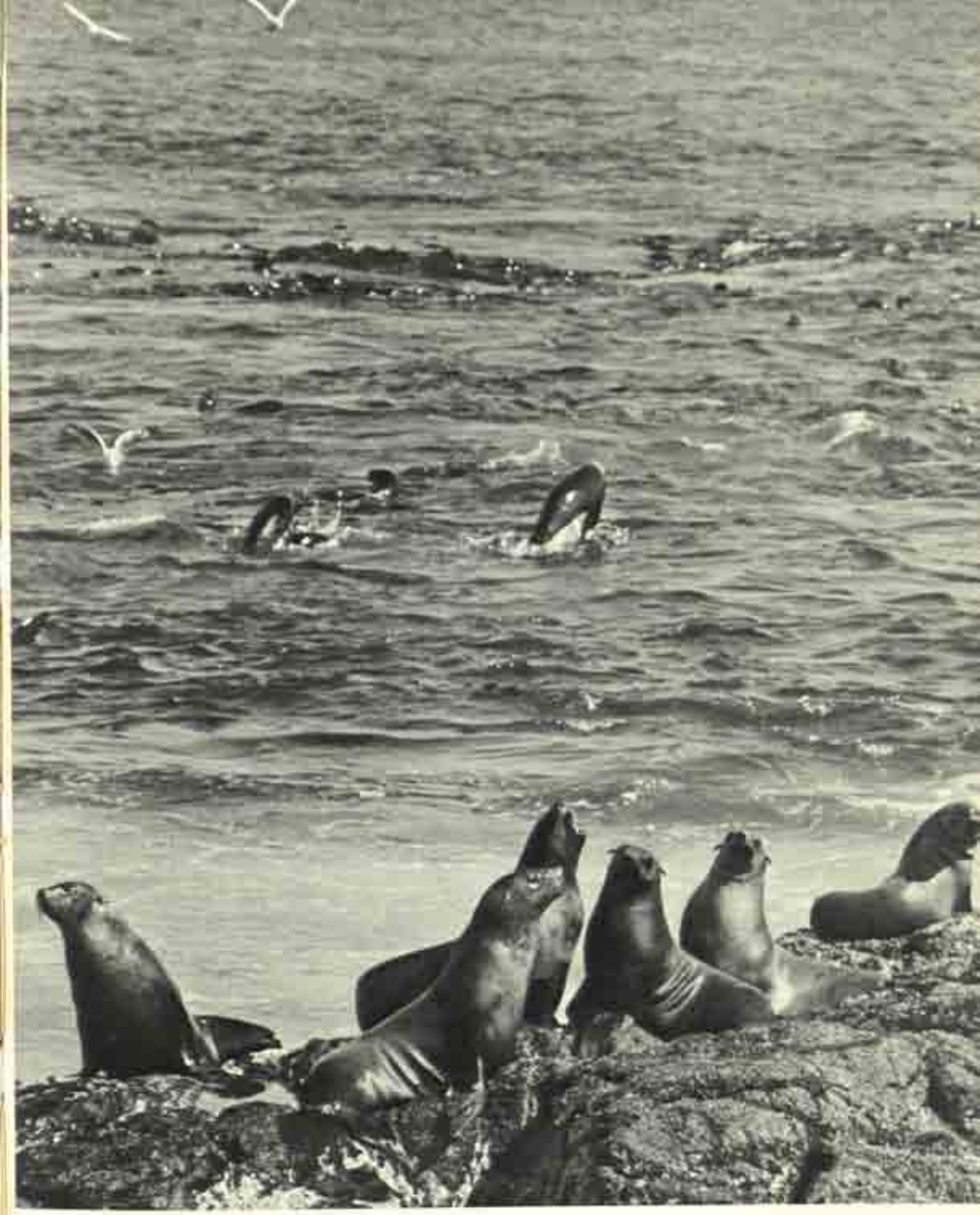
Head-hunting was associated with the Dayaks' hero-worship, with their desire to distinguish themselves in the eyes of the women. It was simply and solely to please their women that warriors in former times returned from their expeditions with head trophies. Today the young Dayak has



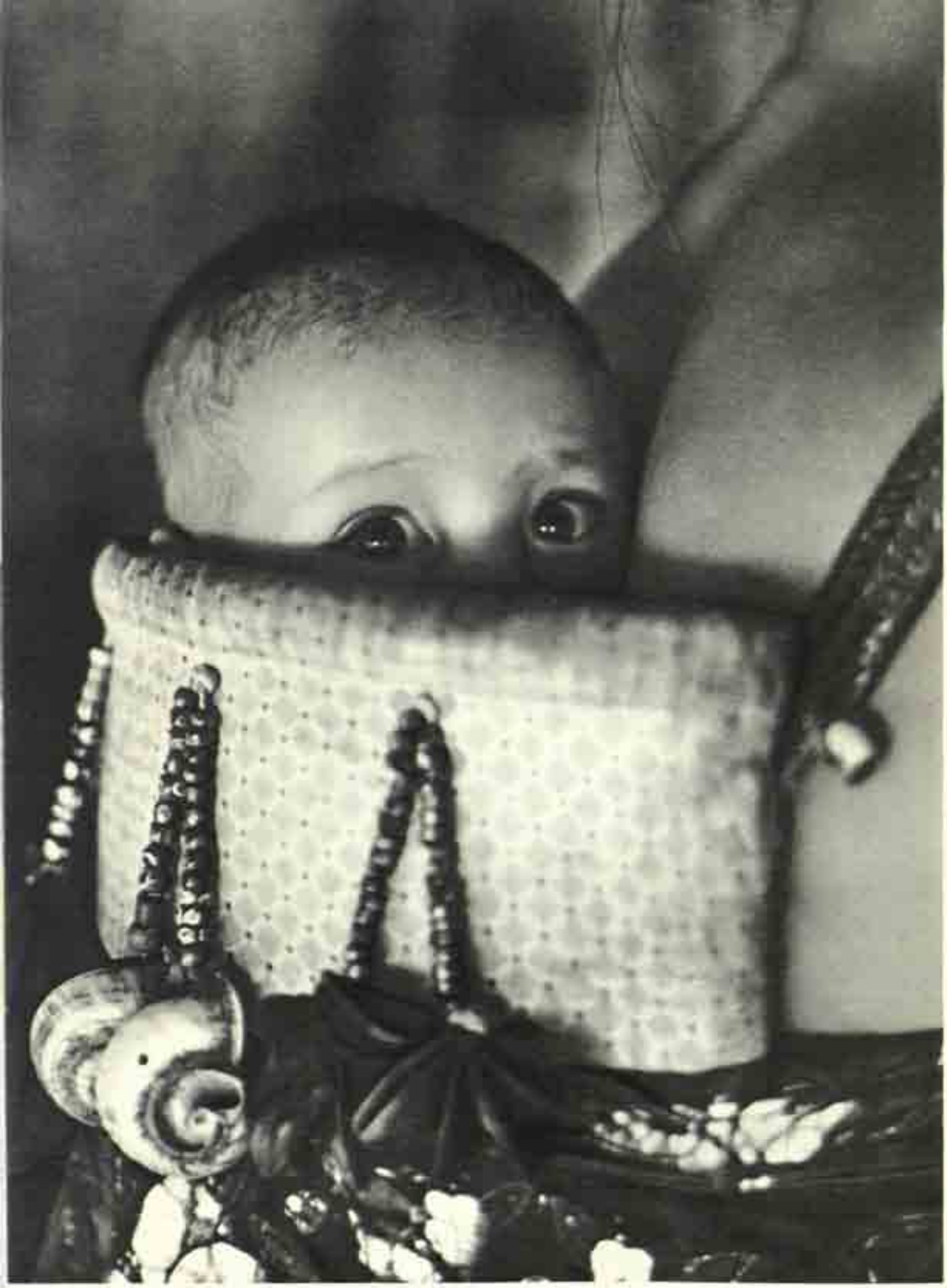
In the evening, at high tide, females of the green sea turtle, heavy with eggs, crawl up on to the shores of Heron Island and make tank tracks in the sand. The eggs are quite round, soft-shelled and the size of ping-pong balls. The number can be as many as 200. In from eight to ten weeks the eggs hatch, and the young turtles are led by instinct, swiftly and straight, down to their proper element, the sea



Washed ashore by the evening swell, with their bellies full of food, the dwarf penguins waddle up to their burrows in the sand dunes



The fur seals can stretch their necks proudly and play in the water at their ease: they are absolute rulers on their rocks, the Knobbies, in the Bass Strait, between Melbourne and Tasmania



In Borneo—a baby's eyes

other means of impressing his sweetheart, or perhaps she is no longer so exacting. (I doubt very much whether the attitude of the authorities, and measures taken by them, have anything to do with the disappearance of head-hunting. In any case the possibility of controlling it is extremely small.)

Those skulls which I had the opportunity of inspecting seemed to be very old. I did discover under the palm-leaf decorations a few which seemed fresher than the rest, but the shape of the head and other signs indicated that the new acquisitions were Japanese. The Dayaks probably took their opportunity when the Japanese were retreating into the interior of Borneo in the last stages of the war. They considered the invaders of the island a legitimate target for the terrible blowpipe darts.

At eight o'clock in the evening there was a thundering on the hewn planks of the verandah where the dance was to take place. The fire burned more brightly and the oil lamps flamed like fireflies. The men came first and sat down on the rattan mats. The women moved about in the background like shadows and did not as yet dare to come forward. The naked children sat on the ground in front of me. They were more interested in the white man's doings and in his curious machines than in the dancing.

For half an hour the musicians twanged at the two- or three-stringed, monochord-like instruments, before the first woman glided into the circle of light round the paraffin lamp. Her bare feet marked the time: she moved her hands and arms in graceful sweeping movements, while her hips remained stiff. The close-fitting black and red checked sarong magnified the slight movements of her body. The two bunches of tin rings dangled at her breast. Her face could hardly be called beautiful, and it was shut and serious. She wore her hair turned up under a bast cap, adorned with fruit beads of different colours. Neither time nor movements were changed in the course of the dance. After a quarter of an hour she suddenly left the stage as quickly as she had appeared on it.

The musicians changed their tempo: a man arrayed in feathers appeared and stood for a moment in apparent concentration, as if seeking strength from the gods. A thick plume of feathers hung down over his back: a long red cloth was wound round his hips and between his legs. On his left hip he carried the *mandau*, the jungle knife, eighteen inches long, with a close-fitting wood and rattan sheath and a shaft of deer's horn, adorned with human hair. He held in his hands huge bunches of feathers from the wings of the hornbill, and on his head he wore a pearl-embroidered cap with argus pheasant feathers three feet long. His bird dance was rhythmic and dramatic: sometimes wing feathers were fluttering in his hands, some-

times hardly any movement could be detected. In the violent climax of the dance the feathers quivered like those of a turkey-cock with the mating urge, the dancer leapt swift and high, uttering hunting cries: '*Ooeeii! ooeeii!*' The yells of the men who sat round egged him on to further demonstrations: saltomortali, rolling his body and dancing straddle-legged.

The men discussed the dance, while the women and children sat silent and enthralled. Not a laugh was heard, not a smile was seen, and to judge from the dancer's mimicry the symbolism of the dance was mainly of a tragic nature. But after a rather long discussion among the men the turn of the burlesque dance came. Long before it had begun merriment had spread among the spectators.

Three men entered the ring. Two were dressed in loin-cloths, the third wore a white shirt. He was the white man, and after only a few movements of the dance I understood that he represented the American missionary. So the subject of the burlesque was modern.

The missionary is out on the river Belajan in his stern-kicker. The engine goes wrong: he has to jerk and pull at the starting cord, the sweat pours down his face, which tells of severe suffering. The engine gives a puff now and then, but will not start. The other two men, the passengers, have to help with paddles and poles. The current is strong: suddenly the boat capsizes and all three are in the water. But the two Dayaks succeed in pulling the helpless missionary out, and they save his travelling gramophone also.

The reaction of the public during and after this dance was tremendous. The men laughed and yelled, the women's bunches of rings jingled as they struck their chests and hid their faces in their hands, the children jumped for joy and excitement, and the dogs barked loudly. I sat there, amused but also astonished at the acting ability which the dancers had shown. The caricature of the white man was certainly naughty, but it was not cruel. It was intended only to show the helplessness of the missionary, who took his little bit of America—the travelling gramophone!—with him everywhere in the jungle, and consistently refused to adapt himself to the Dayaks' own way of life.

Blowpipe Hunting

One morning there was more life than usual down by the river. A canoe had just lain to, and four dogs rushed up the slope. It was a party of hunters coming home, and they had had good hunting. A *banteng* heifer—one of the wild cattle which are kept tame in Java and Bali—and a wild boar lay in one of the canoes. The men had been away a whole week:

there is plenty of game in the jungle, but the Dayaks' hunting equipment is as primitive as it has been for thousands of years. The blowpipe is their only weapon. The dogs bring the quarry to bay, and when the hunters arrive they blow a rain of poisoned darts at the animal, after which the whole party flings itself on the beast and stabs it with the blowpipe darts till it is dead. After a good hunting trip there is a banquet in the *lamin* and everyone is belching happily for several days afterwards.

When one of the older men, Unke, was going out hunting one day, I asked if I might go with him. We passed the rice sheds and dwelling-houses on their high posts. Unke went first, with a brown and white skin cape on the upper part of his body, a cap with long feathers on his head, and his blowpipe in his hand The *mandau* and the prettily ornamented bamboo quiver hung from his belt. He crept forward almost noiselessly. It was still early morning, and the cicadas and frogs had not become silent. Birds were fluttering high in the tree-tops, in the sunlight.

I soon acquired the first clusters of leeches round my ankles, and when we stopped to listen for game whole colonies of venomous tailor ants attacked us. Unke saw in the dark much better than I did and avoided these unpleasantnesses more easily.

The humid air was oppressive. Now and again Unke made a sign to me to stop: he had heard something suspicious and crept forward alone. In a little while he came back, disappointed. A couple of wood fowl flew up noisily close to us, but too quickly for Unke to have any chance with his blowpipe. The Dayaks do not often succeed in bringing down birds on the wing.

We had sat down on a gigantic fallen tree: we rested there for some minutes, and I was delighted to see a strip of blue sky. The moist half-light which always prevails in the jungle is depressing. Dense vegetation surrounded us: the lianas hung like curtains and bounded the clearing which the great tree had made in falling. Bluish-white flowers that looked like fishes' roe grew as thickly as on raspberry canes: stiff, rush-like grass formed an undergrowth: bushes which did not reach any height anywhere else pressed for more space. Bees buzzed round the patches of flowers. They looked like house flies, and when they settled on my bare, perspiring arms I noted that they were as harmless.

Unke soon went on. We arranged by signs that I should stay in the clearing till he came back. While waiting I tried to find out where the bee-hive was. It was not difficult. The entrance to the hive lay about six feet above the ground in a large hollow tree, and it was peculiarly constructed. It was built of resin and consisted of a tube a foot long pointing

straight out from the trunk. It looked like a pale yellow strip of plastic, and its diameter was a third of an inch. The inside appeared to be oiled, and it was easy to get in or out of the hive. I found out later that this kind of bee, when it is going to form a community, always makes for the hardest kinds of wood. The object is to escape from the Borneo bear, which is mad on honey. It cannot get at the wax combs, for the entrance and the hard wood form an effective lock.

Not till the afternoon was Unke's trouble rewarded. We were on our way back to the *lamin* and passed an old piece of cultivated land which had almost been reconquered by the jungle. Here we put up an animal of the marten tribe with a long tail: I could not see much more of it, as it climbed a tree-trunk at lightning speed.

Unke squatted down and put the silver-mounted mouthpiece of the blowpipe to his lips. He aimed, pressed his lips against the mouthpiece with inflated cheeks, and blew the light dart forward with a sharp smacking puff. The distance was more than 20 yards. The animal ran on from the branch it had been lying on and sprang up into the top of the tree. But a few seconds later its claws could grip no longer: it lost its foothold and fell to the ground dead.

Unke's booty was a *musang*, a Malayan palm marten. The arrow had penetrated its buttocks: the wound was nearly a third of an inch deep. Unke grinned with pleasure at his good shot and held up the *musang*, an animal which causes the Dayaks a good deal of annoyance. It creeps right up to the *lamins*, steals chicks and sometimes dares to attack fully-grown fowls.

Proud as Unke was of his well-polished blowpipe, he succumbed to the temptation to exchange it for a nickel-plated lamp on a stick of Japanese manufacture and a few packets of cigarettes. The blowpipe, about six feet long, has a well-wrought spear-point bound firmly to its muzzle. The barrel shines like a freshly oiled rifle barrel: the calibre is about a seventh of an inch. The darts are simple sticks, seven inches long, with a conical cork of pith like elder pith at one end: the cork fits the barrel exactly. The dart is as sharp as an awl and is smeared with a brown poison of a sticky consistency: this is called *ipu* and consists mainly of a viscous sap which is tapped from two or three different kinds of tree in the jungle. The sap is boiled, dried, powdered and mixed with other ingredients, which were formerly kept secret. The *ipu* poisons—there are several—are probably derived from the vomic-nut tree and are thus, like the *curare* of the South American Indians, a strychnine which paralyses the central nervous system. When the Dayaks are hunting bigger game, such as wild

oxen or wild pigs, they use broader darts and smear more poison on to them.

I wanted to learn how to use the blowpipe and began to practise without darts, making tremendous efforts to blow hard enough. It was more difficult to hold the pipe steady than to hold a rifle or a camera without one's hand shaking. A Dayak blew a whole shower of darts and it looked simple. They swished into the tree-trunks: at a range up to 50 yards there was a loud crack when the dart penetrated the bark. The marksman hit the slenderest palms and the smallest targets.

When I took the blowpipe again, children and men gathered round me: the white *tuan* was going to show what he could do. I thought it prudent to begin modestly and therefore aimed at a big tree about ten yards away. I concentrated, drew in air pressed my lips together and blew as hard as I could. I hit the tree all right, but the dart described a steep curve, and reached the trunk a good six feet under the point I was aiming at: nor did it remain fixed in the trunk, but fell into the grass. I had never heard, and never was I to hear the Dayaks laugh so heartily, so helplessly and without restraint. I used at least a dozen darts but never achieved a better result. Roar after roar of laughter rang out: my fiasco was as complete as that of the missionary out in the river in the burlesque dance. My high colour, however, was due not to the ridicule I was exciting, but to the exertion of blowing into the tube.

The chief Ari's piece of land—it is called *ladang* in the Dayaks' language—was about 2½ acres in extent. It lay between a mile and a mile and a half beyond the *lamin* and of course quite near the river. The Dayaks clear a new piece of jungle every year for the cultivation of rice: they cut down and burn and cleanse the ground as necessity demands and no more. Ari's land was now ready for sowing, and for this important event he had mobilized the whole of his family and a wide circle of friends. Altogether there were about 30 of us to poke the rice seeds down into the wet mould. Of course I thought the field looked untidy, with charred trees, and stubble and great roots three feet high. But the clearing of stubble is unknown, and there is no equipment with which to attack the roots of the giant trees.

The men walk in a line and with pointed sticks make holes in the ground an inch deep. Women and children follow with the rice, which is carried in little plaited baskets or in pretty carved bamboo tubes. The sower throws ten rice seeds down into each hole with astonishing precision. Last goes a man with filling-up seed in a bag which he takes in a carrier on his back.

The sowing is a fascinating sight, framed as it is on three sides by the green jungle, while the fourth side is open to the river. The sweat glistens on the men's naked chests and backs: the women wear wide palm-leaf hats adorned with bits of cloth of different colours and tinfoil. They sway rhythmically in the heat of the sun: their blouses shimmer in all the colours of the rainbow, and their red and black checked sarongs gleam like large tropical butterflies. A few creamy white cumulus clouds sail in the deep blue sky.

The ground does not yield more than one rice crop in the year: it is too poor, and the people have not learnt how to irrigate the fields: the plants have to be content with the cloudbursts of the rainy season. A great deal of the rice is taken by the birds, for the seeds are never properly covered. There are no big rice crops, but they are sufficient to maintain life, and there is usually something over for the making of arrack for the harvest festival.

The luncheon interval is as longed for here as elsewhere in the world. Before we eat we bathe. The men dive into the river with their clothes on, the women slip in between the canoes by the bank, throw off their hats, loosen their close-fitting *kabayas* and let the sarongs slip down over their bronze-coloured hips. No one is afraid of the *boaja*, the crocodile. After bathing the thick sweet rice pudding tastes excellent under the palm-leaf roof of the shelter. It is divine food for empty proletarian stomachs.

The darkness falls swift and profound when we return to the village, climb the log steps and go in through creaking doors, each to his own place. The palm-leaf cigarettes are lit, conversation begins and is certainly about *tuan kodak*, the camera man, and his strange contrivances. The white foreigner, the great blowpipe hunter. . . . Merry laughter rings through the friendly long house, in the heart of Borneo.

CHAPTER 7

To an Unknown Garden

A fair-skinned man, a head taller than the paddling Dayaks, rose easily in the slender canoe and stepped ashore. He advanced to the log steps, on the lowest notch of which I sat washing a couple of shirts in the river, held out his hand and said:

'Good evening, Mr. Gillsaeter. How are you?'

A meeting between two white men on the banks of the Podoho might —without any idea of comparison—have a remote resemblance to the meeting of Stanley and Livingstone at Ujiji nearly ninety years ago. At any rate my heart gave a few extra beats of pleasure, perhaps of pride also, when we shook hands, surrounded by staring, chattering Dayaks. For the man who had made his way to the same place in the centre of Borneo as I was not just any white tourist.

A Trying River Journey

Professor André Kostermans, a wiry man of about fifty, was going into the jungles of Borneo for the seventh year in succession to collect

botanical rarities. He was head of the Botanical Institute at Bogor. Barefoot and wearing nothing but a pair of shorts, he is as much at home in canoes and in the virgin forest as the Dayaks, whose language he speaks fluently.

He was stopping at Bilatalan for a few days to persuade the Dayaks there to accompany him further up the river, to a mountain which the natives call Gunung Mejo Besar. The expedition would take a fortnight. This was my first meeting with Professor Kostermans, but we had known of each other's movements for some time through common acquaintances. So now we were to camp together for a fortnight. Like his Javanese and Bornean assistants, I subordinated myself to his unerring leadership from the first moment. As the days passed I was more and more impressed, not by his botanical knowledge—of which I am not qualified to judge—but by his unsurpassed ability to get on with the Dayaks and with nature. A man like André Kostermans makes up for the errors of many white men in these respects.

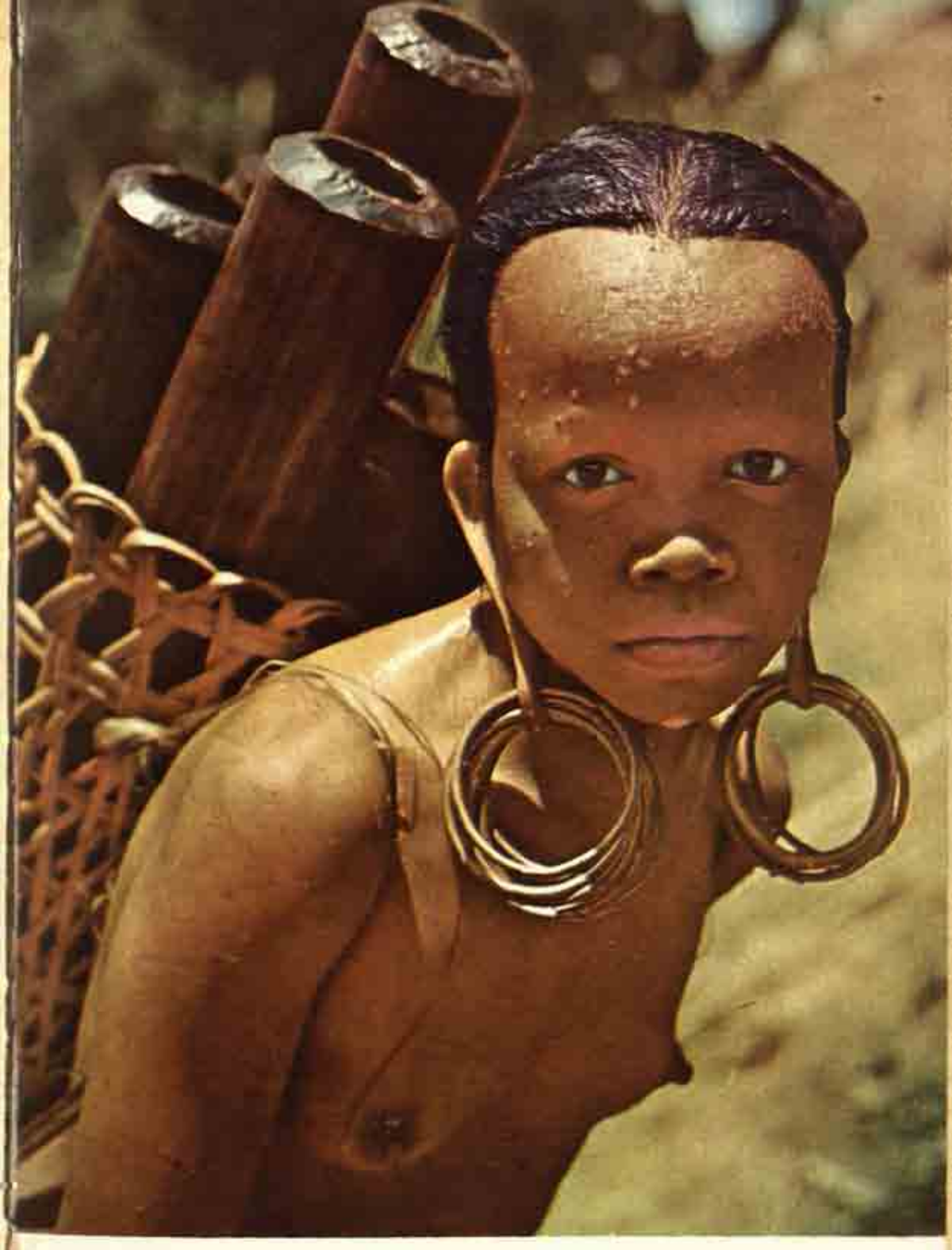
We started one morning when the day was just beginning to break. A long chain of helpers heaved the grey galvanized iron demijohns down from the long house to the canoes, while a large party of men carried on their heads bags of rice, tents, tarpaulins, kegs of spirits, camera equipment, and all the small packages our expedition was taking. The long house had provided sixteen men, and Kostermans had brought six assistants with him, so the whole expedition consisted of 24 persons.

The *prau* in which I sat was so heavily laden that my fingers were continuously in the water as I clung desperately to the bulwarks. A Dayak canoe is between 18 and 24 feet long and draws 15 inches. She is so narrow that a white man of normal build has to squeeze himself between the bulwarks, and I had to sit for hour after hour with my legs stretched out straight.

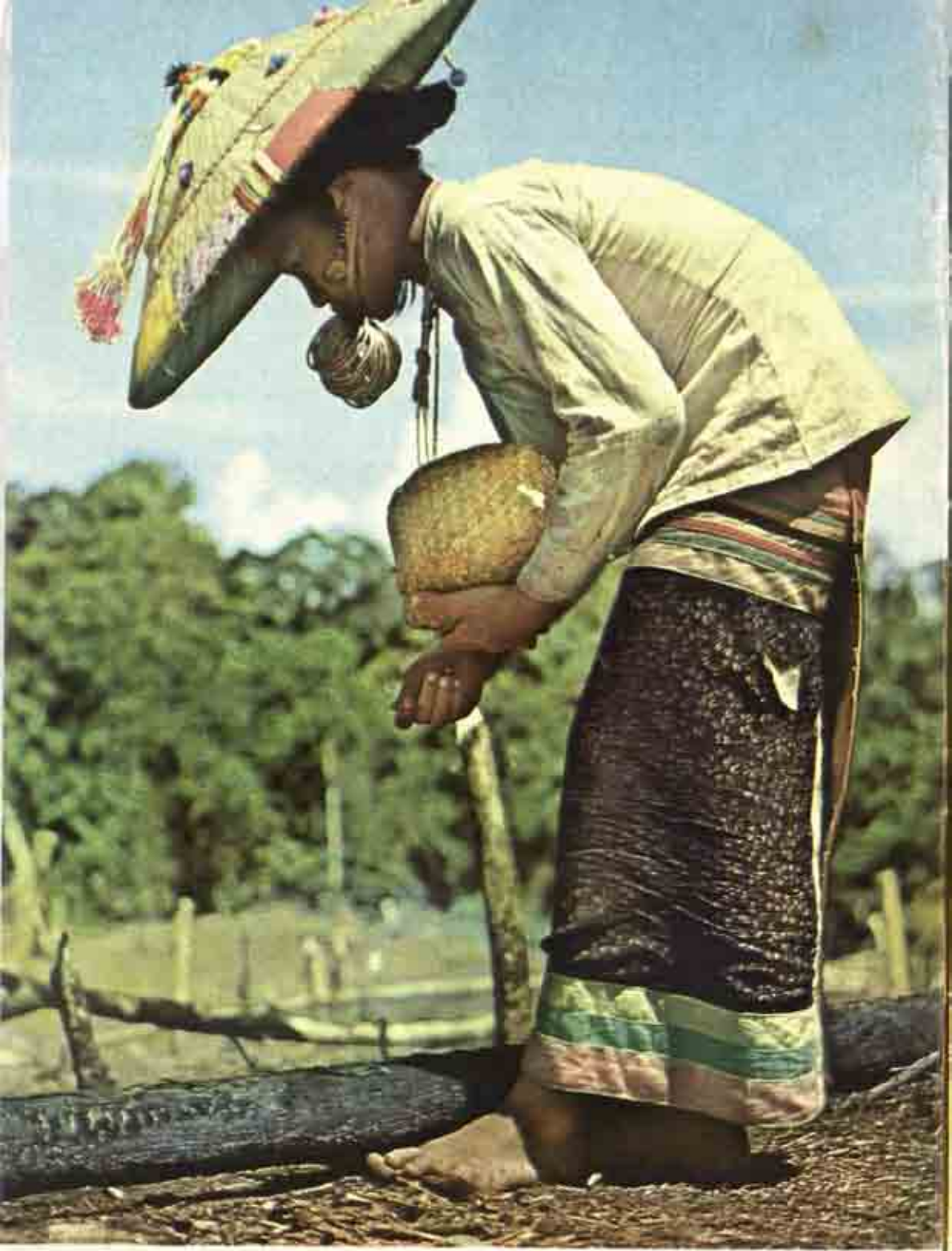
I had my cine camera and Hasselblad on a stand in front of me, and I had covered them with a shirt and a plastic sheet to prevent them from being splashed. They had to be ready for action and at the same time protected from the worst heat.

The paddles whirled like propellers in the sunshine. A violent downpour in the night had caused the water of the Podoho to rise more than three feet, and now something like a huge wave rose up and swept forward through the jungle. The fleet of canoes was strung out. When we rounded bends in the river I could see only two of the boats ahead. I dared not look astern, for fear that the canoe would capsize if I turned my body.

In the afternoon we paddled into the tributary called the Mejo, which



This golden-brown beauty in the interior of Borneo fetches her household water from the river in dark-stained bamboo canes.



A sacred act. The Dayak woman, bowed as if in prayer, throws about ten grains of rice into each of the little holes in the cleansed earth which the men have stirred up with sticks.

would lead us to our destination. One noticed that the course of the river was taking us up into the mountains: the water was as clear as a mountain beck—the first clean water I had seen in Borneo. The Dayaks kept up a subdued humming all day, but for several hours of the next day they were silent. The water, now dark, became shallower: the crews had to punt and showed quite acrobatic skill in handling the long thin poles. Cream-yellow balls of foam on the surface were a warning of the rapids we were going to meet. Soon the water was whirling and boiling around us. The man in the bows of my canoe, Apo, stood straight and sure, got purchase against the stones and pushed us away from them. The man in the stern shoved as hard as he could: we were lifted over the rapids, and the canoe shot through such narrow passages between stones and fallen trees that sometimes my knuckles were scraped against the edges of the rocks.

When we were out in quiet water again I baled the canoe out. The baler was a cleft bamboo stick, and it was a pleasant feeling to have something to fiddle with after all the nervous strain. Of course I considered that as passenger I had the worst job, and I had no one to talk to, as the professor was already at the next rapids. The canoes were too spread out for me to be able to take any general views, while the permanent threat of capsizing in the rapids made me stiff and weary, so that I could not handle the cameras with proper enthusiasm. My legs had gone to sleep, my eyes wandered over debris of stones and whirlpools. For an hour the sunlight trickled down through the roof of trees: the sun's rays were reflected from the black surface of the water as if it were silvered. The next hour, everything disappeared in thick rain and no one had a dry stitch on his body.

But after we had halted for a meal I recovered so far that I prepared everyone, through Kostermans, for my canoe to go first up the next big rapids. I would set up the cine camera on a rock in the dead water above them. So far there had been no casualties, even though some of the Dayaks had scratches on their legs from wading in the rapids.

A Crocodile and Soaked Films

The rapids I had chosen were not among the swiftest or most dangerous, but they were long, and it was light under the roof of trees. When I was setting up the camera on a flat slab of rock Apo came wading cautiously up to me, signed to me eagerly and pointed towards the other bank.

'*Awas, awas tuan! Boaja ada!*' (Look out, sir, there's a crocodile over there!)

I signed to the canoes below the rapids to stop, and crept after Apo with the camera and stand. The crocodile was hard to make out: it lay dozing

on the edge of the bank, half hidden by mud and slush. I noiselessly fitted the telephoto lens to the camera, and by making use of the whole of my store of gestures I made Apo understand that on a signal from me he was to yell 'cro-co-dile' as loud as he could.

The camera began to buzz. I let it go for ten seconds, directed at the grey lump of armour, and then came Apo's yell. The effect was remarkable. Before the crocodile slipped down into the river it gave an irritated yawn, so that I was able to film at my leisure the huge jaws with their two imposing rows of teeth. I could not have had a more responsive actor. The creature made off, the movement of the water revealing its course as it shot upstream at full speed and hid itself under the thick vegetation on the shore. Apo fled too. Splashing and jumping he heaved himself up into the canoe, and the expression on his face showed a great respect for the reptile.

The Dayaks applauded the successful filming, a break in the toilsome daily round. The cramp which had tormented me earlier was now dispersed. I took long series of pictures of the canoe armada as it worked its way up the rapids, showing the perfectly synchronized co-operation between the man in the bows and the man in the stern. Fear had lost its hold on me.

When we resumed our journey I sat carelessly leaning back in my *prau*: I even allowed myself to bend my legs. But in some lesser rapids a big branch appeared on the surface, and I did not perceive the danger at once. The branch was firmly fixed to the bottom, while its free end bobbed up and down in the current. When it pushed in over the edge of the canoe I just turned it aside, but then it became caught in the tent equipment behind me. At the very moment when I was turning, Apo yelled:

'Kodak, kodak!'

The cameras had overturned on their stands.

I reacted with lightning speed and grabbed the leg of a stand—and then the canoe upset. I kept my grip of the stand when I went under. But the water was not more than knee-deep and the current not too fast for me to rise and lift the cameras, which luckily remained fixed to the panorama head and stand-spike, still wrapped in shirts and pieces of plastic but dripping wet. Apo held the canoe, while the man in the stern went after things which were floating away. Some of the equipment was lashed into the canoe, and we were able to save most of it.

The reaction came when we had all assembled on the bank. I was trembling. It was hard to stomach the loss of the reels of colour film showing the crocodile and the ascent of the rapids. The disappearance of a

sleeping bag, my spectacles and one cassette of still film was not so important. I had thrust the rolls of film into the breast pocket of my shirt, and if I had emptied the water out of the pocket at once the pictures might have been usable. But I was so bent on saving the cameras that I forgot everything else.

The cine camera was full of water. I had only to tear out the film, take the whole camera to pieces, soak the parts in 96 per cent vegetable spirit and lay them out to dry on the hot stones of the shore. It showed no symptoms of chill afterwards, but worked perfectly all through the tour. The delicate mechanism of the Hasselblad camera ceased to work, but I had a spare camera case in one of the watertight galvanized iron boxes. I had got off easily after all. A few months earlier a French film expedition in Borneo had capsized in a river and lost all its cameras and three months of film material. . . .

Through Leeches to the Chimney Tree

A thundering waterfall announced the the Mejo was not navigable any farther. The canoes were moored with thick lianas, we unloaded our gear, and in half an hour the Dayaks had built a quite serviceable bivouac of stumps, slats, bark plants and rattan, with the floor 18 inches above the ground. My respect for their capacities grew: we should have been helpless without their expert knowledge.

With the equipment stowed away in rattan baskets, the porters struggled on with their loads along an almost invisible track, up slippery hills, down into deep ravines, over slimy, half rotten tree-trunks. We dragged ourselves forward at a snail's pace: often we had to enlist the help of lianas and the almost dead stems of trees, trees which had gone under in the competition for light. The darkness under the jungle roof was even denser than out on the river. At regular intervals the cloudbursts flung buckets of water over us. The plashing of the rain sounded far off, like the beating of discordant light drums.

The black leeches were blind, but their other senses guided them. Our ankles were soon as bloody as if they had been hacked with knives. I did not feel anything when the leeches hung on: I only noticed suddenly that my shoes had become wet inside and had a warm sticky feeling under my soles. The leeches were able to push their suckers through the eyelets of shoes and penetrate stockings. They had to be torn off.

Green leeches, also blind, tumbled from the trees. No sooner did they smell a perspiring body than they fell upon the victim and stuck fast to his neck. The leeches collect on the tracks used by deer and wild pigs.

They can live without food for a whole year. They wait their time, and when they can fill themselves with blood they can live for two years more.

In prickly rattan palm scrub the runners caught in everything, scratched one's skin, twined themselves round one's breeches. Kostermans walked all the time with his glasses ready, stopped now and then and studied the tree-tops. When he caught sight of a flowering tree he did not know he immediately ordered it to be felled. Then two Dayaks placed themselves one on each side of the tree and began to swing their small axes. Sometimes they had to make a position on which they could stand and cut, for some of the giant trees had wide masses of roots as much as nine to twelve feet long.

The simple axes were more effective than anyone could have supposed. They were beautifully springy: the slender shaft, growing thicker towards the head, was fastened to the axe-head with rattan. The trees were often from 150 to 200 feet high, and when one of these giants fell small trees in the neighbourhood were smashed; the roots rose some thirty feet into the air; the earth shook, and twigs, parasites and ants rained down. Then silence lay once more over the primeval forest. Professor Kostermans and his assistants made their way gingerly out to the top of the fallen tree and picked a bunch of flowers, which were afterwards pressed between sheets of brown paper and put into jars of spirits. Perhaps the family of *Rosaceae* had been increased by a new member, a species never examined before.

Black, well-turned lumps, shaped rather like Japanese lanterns, were often to be seen in the lianas. These were termite nests, constructed of fine-chewed wood and a secretion of lime which the termites produce. In the centre of the mass lives the queen, a fat egg-producing machine which lays an egg every half-hour—and can continue at that rate for ten years! All the other inhabitants of the mass are slaves which cultivate the fungus beds; these are manured with the termites' excrement mixed with chewed wood.

A ball in a liana resembling a seed capsule proved to contain little black ants. The capsule was fixed to a plant which had entered into symbiosis with the ants. The plant had leathery leaves, but only some of them had assumed the capsule form which served as a dry and secure dwelling-place for the ants. The other leaves of the plant were green, the capsules were grey and stood out from the centre in groups of three or four. The ants lay up their stores inside the capsules, and their excrement is used to nourish the plant. When the ants have moved in, after a time the plant sends down roots through its own leaves and brings up nourishment for

them gratis. As a mark of gratitude the ants defend the host plant vigorously when it is attacked by caterpillars and other grubs.

We met the 'veiled lady', but she was not a very charming acquaintance: in spite of pretty colours she was repulsive. The outstanding veil is of a pale rose colour, the pulled down hat bright yellow. But she ought to have had a different perfume. The veiled lady is a poisonous, stinking fungus, which shoots up out of the moist earth in twenty-four hours. Its seductive colours glow in the eternal twilight of the jungle, and with its disgusting smell it attracts scavenging flies and bees, which then spread the spores of the fungus. If one happens to touch the coarse-meshed veil the fungus falls to pieces at once, but the flies can walk freely on the diamond-patterned hat. Next day nothing is left of the fungus but a jelly-like mass.

The porters rested when they liked: they sat down on their prettily woven mats, which protected them against damp and insects, rolled themselves palm-leaf cigarettes and recovered their breath. But one day Kostermans, as an exceptional measure, ordered a rest. We had halted by a very high tree, the roots of which looked like the base of a big Lapp hut, with a radius of 16 feet. The tree was hollow. The professor arranged the porters in rows on the gentle slope down towards the tree, as if in the stalls of a theatre. He himself collected leaves, twigs and rubbish, piled them up under the tree and put a lighted match to the heap.

He had bidden us to a strange spectacle. The fire never flamed up, it was sucked up into the trunk, and the smoke began to force its way out through all the holes in it, out of twigs and boughs and leaf-stalks. Kostermans had christened the tree 'chimney tree'. And it justified its name. The smoke came out in bursts as if someone was working a bellows inside.

All the inhabitants of the tree fled. The first to leave its unhealthy residence was a large marten with a yellow collar. Then a swarm of bees abandoned the tree, swelling out into a cone—no doubt the marten had been feasting on honey. Bats, beetles, butterflies and birds took flight: burned rats fell down into the fire; a tree snake six feet long twisted in its death agony. The whole tree was now surrounded by fire, the leaves withered and came spinning to the ground, the branches crashed down in front of us. This was something new to the Dayaks as well. Yet again the white man had given proof of his power over nature.

Inaccessible Riches

The chimney tree and the fire in it were a curiosity. As a rule we white men could not compete with the Dayaks in contending with the forces of

nature. One day we had arrived at a river which plunged down a mountain-side in a series of falls, and I considered that the only possibility for us was to make a long and toilsome detour.

But the Dayaks did not share this view: for the porters the shortest way was the best. They flung off their carriers and began to build a bridge. They cut slats and stakes with rapid blows of the *mandau*, bound poles together with rattan for trestles and plunged out into the fierce current to look for positions for the trestles. The slats were fastened firmly to the trestles: rattan, stones and stays kept the plank in its place. In less than an hour we had a safe bridge over the thundering torrent—and one of the Dayaks had even managed to make a hand-rail, which he ornamented prettily by splitting up the bark into long chips twisted in corkscrew fashion.

At the foot of Gunung Mejo Besar, where we were to stay for ten days, Professor Kostermans renewed his acquaintance with his botanical Eldorado, virgin forests in which no white man has ever set foot. An Eldorado for scientists, but certainly no paradise for white or brown men to live in! The jungle is gloomy, that is an inescapable fact. The humidity of the air is fearfully oppressive. We had at least two hours' rain in every 24 hours at Gunung Mejo Besar, but sometimes the rain came pouring down on our bivouac all day and all night, Clothes and equipment, too, smell musty after a few days. The cameras are covered with mould, and —as Eric Mjöberg said in his book *Borneo, the Head-hunters' Country*—'a man becomes green with mould in a few hours if by any chance he happens to sit still for that length of time, and this although the blood runs more easily and the pulses of life beat more freely than at home.'

It was Professor Kostermans' strenuous work that prevented our souls also from being attacked by the green mould of the jungle. For whole days leaves, flowers and fruit were tied up in bundles, packed away in demijohns, and soaked with vegetable spirit so as to survive transport and storage. On his earlier expeditions Kostermans had collected over 15,000 plants, about 10 per cent of which were previously unknown. His collections would keep 50 botanists busy for a century to come.

Utilitarian considerations do not generally appeal to the passionate scientific worker, but Kostermans gave us to understand that 15 per cent of the trees in the jungle could become usable timber. The valuable trees belong to the genus *Dipterocarpus* (with two-winged fruit). Every day we admired their great smooth trunks and tried to estimate their value. But there is no felling, although the trees offer, besides the good timber, a valuable liquid resin, gurjun balsam. There are no roads, the rivers are

navigable only in their lower reaches, and there is no efficient labour. Liberty-loving Dayaks would never be able to adapt themselves to the requirements of large-scale industrial exploitation.

Also, fresh growth is slow, so it is not likely that systematic felling could be profitable under any circumstances. The dipterocarpus trees flower only every third or every fifth year, some only every twentieth year. The large winged fruits sail down from the trees, but lose their fertility in a few days. They contain a grease of which both the Dayaks and certain animals are very fond.

Kostermans found specimens of the oak tribe which were certainly a hundred years old, but whose stems were not more than an inch thick. A few leaves formed the whole top, and the trunk was covered with dripping wet moss. One of the assistants was to fell another tree, the stem of which was about five inches thick, but the axe recoiled and left hardly perceptible scratches on the bark. The tree diffused a delicious scent of honey. It belonged to the family of Leguminosae and its wood was harder than that of the iron tree, although it grew on very boggy ground.

The flowers and herbs of the soil naturally have difficulty in asserting themselves when the dense foliage catches all the sunlight. But where lightning has struck down a few big trees, so that a flood of light pours in, an undergrowth of *Melastoma* and *Clerodendron*, as tall as a man, springs up, together with lilies. The flower-stem of the *Melastoma* rises perfectly straight from the masses of leaves and is crowned with a bright purple flower as large as a water-lily. The flowers of the *Clerodendron* are shaped in a way that reminds one of a Chinese pagoda: they are bluish-white or dark red-brown and have hundreds of pistil threads which hang round the flower-stem like a veil.

Once only was I able to see a lily in its full splendour. The flower had pale rose-coloured petals: it widened to form an imposing cup and opened itself hospitably to all the bees and wasps which were waiting on it. A near relation of the lilies, *Huahanga malayana*, had a cone of leaves with a perimeter of more than fifteen feet, and each spear-shaped leaf was ten feet high.

As for orchids, the jungle has microscopically small species and orchids in bush form, and the professor's assistant Samsi was able to gather 15 different species from a single felled tree. They were orchids with twisted and twined gazelle's horns, 'weather-cock orchids' with bow-shaped stalks three feet high, which separate right at the top into seven small flowers, pale red and yellow, with two petals hanging down like long pennons, fluttering in the least draught. Strangely enough the most

beautiful and brilliantly-coloured orchids grow in the thickest darkness, except, of course, the parasites and epiphytes high up in the trees.

The insect-eating pitcher-plants, *Nepenthes*, have the point of the leaf protracted into a string eighteen inches long, and here the pitcher hangs like a powder-bag. These are dark red, tiger-striped traps. The fiery red lips, as slippery as wax, are more seductive than women's lips—and more dangerous. A large green lid lies an inch over the opening as a protection against rain-water. Both lid and lips spread a sweet scent which attracts the insects. They slip on the lips, and the inside of the pitcher is equipped with slippery hairs curved downwards, which prevent the victim from getting up again. The bottom of the pitcher is a quarter full of water containing pepsin, a devilish liquid which dissolves the insects' bodies so that the plant can obtain nourishment from them. As complement to the chemical decomposition the pitcher-plants have a little insect as lodger. It helps the host plant to chew up and digest some of the victims.

It is the poor soil at the bottom of the sunless jungle which causes certain plants to become insect-eaters or parasites. But there are other ways also of getting nourishment. Professor Kostermans found in the darkness a member of the family *Burmaniaceae*, which has no petals; its corona and stem lacked chlorophyll. The tiny flowers were deathly pale, and the whole herb seemed absolutely dry. It derives its nourishment from mud and rotting leaves.

Most of Kostermans' discoveries are, of course, interesting only to professional botanists. To the layman in the jungles of Borneo the doors are opened to a fascinating, cruel and alien world.

Jungle Animals and Sounds

My hopes of being able to photograph animals in the jungle every day were dashed, partly by the work for Kostermans' collections, which required most of the strength a man unused to the jungle climate could muster, and partly by the continuous rain. In the afternoons I was just as tired as the Dayaks, who toiled under heavy burdens and did all the rough work.

Wild pig rooted in the black earth: it was easy to surprise them, keeping together as they did in parties of five or six. Once I was surprised myself by an old boar. I had been having my evening bathe in the river. I was sitting and meditating, while cicadas and frogs chirped and croaked vigorously in concert, and I was so entirely occupied with my reflections that I did not see the boar till he was a few yards away from me. If I had remained sitting where I was I should certainly have had the big brute on

Above: Promenade deck round the Dayak's long collective house, about 75 yards in length

Right: Entrance of the pigs in Borneo: mama counts her piglets as they return at evening from the clayey slush under the long house

Overleaf: The Dayaks are past-masters at manoeuvring their narrow boats in swift rapids

Above: Expeditions in the jungle are not all toil and sweat; the evening comes, with bathing and games

Left: Dayaks care as much about their personal appearance as any other men. Their hair is not allowed to grow wild like the jungle vegetation

top of me. As it was he turned about quickly, the water splashing about him as he rushed up out of the river. His hoofs clattered on the slabs of rock behind me: there was a crashing of boughs and bushes in the steep ravines as the boar rushed through, and I could hear his angry grunts for a long time. *He* was not accustomed to being disturbed during his evening bath.

Macaques often sat and abused us. They used to accompany us in parties of 15 or 20 as we walked along the rivers. They went along the other bank, chattering. Gibbons keep together in families and live up in the trees, out of range of the camera. Their noise reminds one of the barking of a dog, and only that and the movement up in the trees disclosed where they were.

When photographing flowers for Kostermans I saw many queer insects: poisonous polypods, harmless gaily-coloured millipedes, and praying mantises bewilderingly like the boughs on which they waited for their prey. The praying mantis, nearly three inches long, has received its name because it always looks as if it was deep in prayer: the long forelegs are folded under the body like the blades of a folding knife. If an unsuspecting fly comes within range, the forelegs shoot out, seize the fly between the barbed legs and crush it fast in a lethal grip. The praying mantis is a cruel insect in other respects: the female devours her mate during the act of mating, but in order not to be deprived of her pleasure she begins with the head.

Once when I was sitting waiting with the camera I involuntarily knocked against a bough. A leaf tumbled down on to my breeches—and began to walk lazily up my leg. Quite an ordinary green leaf with jagged edges and veins like an oak leaf. The natives believe that the leaf has been on a tree and has acquired a mouth and legs to be able to attack the troublesome plant-lice which are on the tree. The ambulatory leaves belong, like the walking stick insects, to the family of the *Phasmidae*. Their eggs look like cress seeds and lie spread on the ground, as if they had been knocked out of a tree. The ambulatory leaves are at first small and fiery yellow, so that they resemble the withered and decaying leaves among which they live. After a time they climb up the mother tree and then assume the same shape and colour as its leaves. They are voracious leaf-eaters. In the daytime they sit motionless on the undersides of the leaves: in the evening they become lively, and then the crunching of their jaws as they chew up the leaves can be heard.

Immediately before a cloudburst the jungle becomes deathly silent. Everything is holding its breath, waiting, seeking shelter. And then when the rain stops, as quickly as it began, the cacophony starts. An old fashioned

threshing machine could not sound worse. The frogs begin: their catches and mating calls are mingled with the shriller noise of the cicadas. Motor horns hoot in the darkness, coffee mills grind, fiddles squeak. Every morning and every evening a baby utters heart-breaking cries. The first time I heard that cry I was on the point of plunging into the thorny undergrowth of rattan palms to rescue the unhappy child. But I found that it is the male of a species of cicada which produces the illusion of a crying child. It rubs its hind pair of legs against the shields which cover the empty stomach, and this acts as a sounding-board. The Dayaks believe the sound comes from the evil spirits which run riot in the darkness of the primeval forest. Many of their ideas of good and evil are based entirely on the noises of the jungle.

The trees on the slopes of Gunung Mejo Besar were covered almost to their tops with thick layers of dripping moss. In the ravines of the becks the undergrowth stood as close-set as a hedge, and ferns hung from the rocks in thick clumps. Green lichen, as slippery as eel's slime, covered the decayed trunks that rose up in our path, and seven different plants could be found on one single stump, from insignificant little orchids to brilliantly coloured colonies of poisonous fungi. The higher up the mountain we got—the untiring Kostermans, his assistant Samsi and I, for the Dayaks would not go up the mountain, the home of evil spirits—the more sparsely the trees grew, the nearer the ground their tops came. The stems became more crooked and gnarled, and a few casuarina trees rose straight and clean above the deciduous foliage. The swarm of lianas was thinned out, the air was still humid but cooler than before. When we stood on the top after a strenuous climb of six hours, our limbs grew stiff with the cold.

The view from the summit, a good 3,000 feet high, was a disappointment. To get any idea of the landscape round about us I had to climb 75 feet up a tree, and from there I saw only a dark-green carpet, sharply wrinkled with ravines and mountain ridges. A dead, lifeless landscape, without any wind sighing in the tree-tops, without the twitter of a single bird. The sun was hidden by lilac-coloured clouds, heavy with rain.

Professor Kostermans found a palm he did not know up on the mountain. Samsi noted a rhododendron he had not seen before. I myself enjoyed the sight of flowering whortleberry scrub. I thought of Swedish woods and Swedish summer.

But the scrub reached to my shoulder and I could not pick a handful of berries. . . .

CHAPTER 8

Komodo at last

'In the twentieth century a new species, the Komodo varan, *Varanus komodoensis*, has been discovered in the Little Sunda Islands. This is the largest lizard now living: it can be a good twelve feet long. Its colour is greyish-black. The Komodo varan occurs in a limited area of Western Flores and on a number of small islands, of which Komodo is the largest, south of Celebes. It was not discovered till 1910. It is a very swift and active predator, which . . .'

Yes, that is what the reference book says. But Pranowo, my excellent Indonesian assistant, looked at me imploringly and begged and prayed:

'*Tuan*, I don't care how hard the journey is, if only I may come with you! I'll begin to take seasickness tablets before we ever leave Jakarta, and if I'm seasick all the same I promise not to complain, *tuan*!'

Most Indonesians do not know that among their islands, numbering over 3,000, they have an island called Komodo, on the map the size of a pin's head, an island which is cut off by the strong currents in the Flores Sea, a world eroded and cut to pieces by volcanoes, a pre-historic land. A worthy frame for the giant lizards which ever since their

discovery nearly fifty years ago have been likened to dragons and basilisks.

Of course Pranowo was allowed to come. He left accompanied by many vehement admonitions:

'Don't let your luggage out of your sight for a single minute! Sit on your boxes! *Selamat jalan*—a good journey!'

It was a very pale Pranowo I met again a week later in a cabin on board the motor ship *Waikelo* in Surabaya harbour. It was a cabin for ten.

'*Tuan*, I've been sick all the way from Jakarta, very sick. But nothing has been stolen—all these boys are military police. . . .'

Beauty and Bureaucracy

When I woke next morning the silhouettes of Bromo and Merapi, the smoking volcanoes of Eastern Java, were fading away astern, and ahead of us Gunung Agung in Bali, the dwelling-place of the gods, was already rising out of the morning haze. But this time, during a call of a few hours at the port of Buleleng, the paradisal island gave me only the memory of 700 squealing black pigs which the Hindus in Bali had fed up and were now exporting to the Christians and Chinese in Celebes. Several hundred of our thousand or so of deck passengers had to move elsewhere and make room for the unfortunate pigs which were shoved into cylindrical rattan baskets and heaved on board in bundles, more or less as bales of pulp are loaded in the harbours of Northern Sweden. The baskets were rolled across the deck and piled up on top of one another in seven or eight layers. The pigs shrieked, their legs sticking out between the bars, their bleeding snouts lacerated by the sharp edges. The poor beasts were to endure this ill-treatment for five days and nights. What would they look like when they were—no doubt as cruelly—unloaded at Macassar?

The Little Sunda Islands are a string of pearls running down towards the mainland of Australia. At Ampenan, on the black volcanic island of Lombok, thousands of oil lanterns flared in the dusk. They were in the hands of white-clad people waiting for a ship of the Blue Funnel Line which was to take them on a pilgrimage to Mecca.

The next island is called Sumbawa. I had been advised, for military and political reasons, to land at Sumbawa Besar and travel by jeep for nearly 200 miles to a post on the eastern side of the island, where I could get a boat to Komodo. I took this advice and devoted the whole day after landing to collecting necessary documents. I must have a police permit to continue my journey, a *permis de séjour* from the military authorities and a military escort during my drive in the jeep: the Customs must

examine my papers and also demanded a bundle of copies of the inventory of my equipment.

The representatives of the Ministry of Information wanted to offer me tea and promised to help me to obtain motor transport with which to continue my journey. The representatives of the Forest Service wanted to see my documents from the high-ups at the head office in Bogor, and I must from now onwards have with me a document certifying that they had seen their superiors' documents. In the course of the day this amounted to a pounds' weight or so of paper, with initials, figures and explanatory signs, with stamps and dashes and commas and full stops. I had a burning desire to insert a large number of exclamation marks into the bureaucratic collection.

It proved to be much more difficult to hire a jeep than I had expected. There were a good many to choose from, but most of them had such defects that the risk of being left standing—or lying—somewhere along the road was judged to be too great. The vehicles were repaired with wire, nails and safety pins, and even bicycle pumps were sometimes found under the bonnets. But the pleasant officials of the Ministry of Information had got in a new jeep by the vessel in which I had travelled, and they were not unwilling to place it at my disposal at a reasonable charge. A reasonable charge—most of the others with whom we had discussed the matter demanded absolutely fantastic prices.

At 7 a.m. on the third day after my arrival at Sumbawa Besar the chauffeur Abdurrachman started the car. His family lived on the other side of the island, and he was delighted with the idea of displaying himself to them in a new jeep.

The road was marked on my map as an 'improved motor road', but after we had driven only a mile or two I realized that this meant an improvised, stony bridle path. There was not a great deal of traffic: men and women in brightly coloured sarongs rode through the cloud of dust that the car threw up, small boys led pack-horses towards the town, fowls and geese ran away cackling, and flocks of monkeys turned their heads in curiosity before disappearing into the bamboo undergrowth.

Sitting shut up in the drivers' cabin I was reminded now of Norrland, now of the uplands of Smaaland. But then a glittering blue kingfisher shot past the radiator and brought me back to reality. Nameless birds appeared, birds whose colours made me want to call them jade bird, purple bird, moonstone bird, ruby eye. There were cockatoos as white as alabaster, pigeons and jungle fowl. A blue-black drongo bird with a disproportionately large tail hung on to the single telephone wire which

follows the road, a wire hung up on posts less prosaic than ours. They lean in all directions, as bent as old men. Some of them have taken root and put out pretty green foliage, with flowers round the insulator red like cyclamen, mauve like lilac or yellow like Siberian pea. The posts had survived the stones thrown up by cars, and the great wounds made by boulders from eroded red cliffs had been healed. They had endured the violent tropical thunderstorms. They were telephone posts with personality, as tough as thistles in a field of oats. And I had ample opportunity of studying them, one after another, as our speed on the stony road never exceeded 25 miles an hour.

We filled up with water in an idyllic fishing village overshadowed by palm trees, and I should have liked to have taken a few cine shots there. The military authorities had strictly forbidden me to use the camera on the way across Sumbawa, but the military policeman who was sitting on the camera had been bribed all the time with coffee, cigarettes and sweets, and there could not possibly be any military secrets there. The policeman followed his instructions rigidly: as soon as I felt for the camera he took his tommy-gun demonstratively from his shoulder. I could not even unfold the banana leaf in which the camera was wrapped.

Great heaps of stones often blocked the road in front of us, but somehow or other Abdurrachman always succeeded in piloting himself and us past them. When we had wound down a slippery mountain road we came down to the many salt pools of the Bima creek, now lit by the moon, and stopped outside the Merdeka (Liberty) Hotel in the town of Bima. After a bath the mosquitoes were able to ravage my naked body just as they pleased under a mosquito net which, as it was full of big holes, seemed to have been put up for the sake of appearances. But I no longer reacted to anything after being swung about for 14 hours in a jeep on the 'improved motor road'.

Next day Pranowo and I met the Forest Service's friendly representative, Kliwo, who showed himself to possess remarkable organizing capacity and the ability to back his words with deeds. He broke down all bureaucratic obstacles and promised to place a good lorry at our disposal for the last 50 miles over the mountains to the village of Sapi, whence we should cross to Komodo in a fishing boat. He would also give us two men and an interpreter who knew not only Indonesian and the language used on Sumbawa, but also the Flores dialect which is spoken by the inhabitants of Komodo.

The only cinema in the town was close to our hotel. A loud speaker was bellowing out the evening's programme, which meant that the

electric motor would be running for two or three hours. This was an excellent opportunity to charge up the accumulator of the cine camera. The remoter islands have no electricity: this was our last chance.

The Chinese—for of course the manager of the cinema was a Chinese—declared that it would be quite impossible to charge such a small accumulator from his generator. After a quarter of an hour's argument I was permitted to try. Of course there was no wall socket, so I unscrewed a lamp-holder and joined up the wires. The light was put out, the oil lamp lit, and I attacked the cable with the remains of a screw-driver, standing on a rickety table. I have never been an electrician, but I soon perceived there there was a job for me here. I tore down the whole tangle of spider's webs that had collected round the lamp. I unscrewed it, and when I loosened the holder a mass of ants and clay tumbled down upon the Chinese. As a result his eyes were bunged up: the ants were evidently poisonous. The excitement spread and I realized that strong language was being used.

But I got current for the accumulator, and while it was being charged I watched with feelings of shame a product of American culture in the cinema. I felt sorry for the nice honest people of Sumbawa who had sacrificed their few coins to see such rubbish. It is not surprising that the newly awakened millions of the Far East get a queer impression of Western civilization when they meet it as depicted by Hollywood. This salvation through revolver-shots comes to Bima once a week.

We set out on the rough but practicable road to the town of Wawo with fifteen men on the deck of the lorry for loading and unloading. Up in the mountains the view was fantastically lovely. The rice-fields lay spread in terraces down to the dry river-bed in the valley. We stopped at an hotel to let the engine cool, and our hosts offered us groats coffee and freshly baked bananas and proudly invited us to look round. And they really had something to be proud of. In Dutch days the hotel had been a popular resort, and was therefore equipped with both a swimming pool and a tennis court. A forest tree was absolutely covered with fiery red flowers, while in its upper branches red and green weaver-birds were hopping about, hanging upside down and imbibing nectar. A party of macaques in the undergrowth kept us under close supervision.

We passed quickly through the three clusters of houses called Maria, Maria-Maria, and Maria-Maria-Maria. (The reason for this curious nomenclature may be that in the Indonesian language the plural is formed by repetition: village is *kampong*, villages *kampong-kampong*). Between the villages the country seemed poor and stony, but rice is cultivated there in the rainy season, and necessities are bought with the money the onions

bring in. For the sweet onion, which is a highly appreciated delicacy throughout Indonesia, comes from the mountains in these parts.

Little Sumba horses loaded with onions accompanied us into the village of Sapi, where we discussed the final preparations for the crossing to Komodo with the district ranger, Mohammad Taijeb Daud. The conversation took place in the courtyard of the inn, with hundreds of more or less naked children round us. Mohammad was the man who was to help me to hire a *prau* with crew, and the no less important task of arranging the price was also his. While he was entering into the negotiations I increased our supply of rice, so that we now had more than 200 lbs. Pranowo bought lines and hooks for fishing during the crossing, and the interpreter Sidik came back to the inn from a walk in the village with a large bunch of bananas and a few half-ripe papayas.

As soon as I showed myself in the village I had a swarm of children after me: it was certainly a long time since a white man had been seen there. I was stared at as a gipsy family would be in Sweden. But they were all friendly and honest. My equipment lay strewn about the yard, no one stole or even touched any of the 'rich' man's belongings.

After a time the ranger reported that he had obtained a boat with a crew of ten. The skipper was willing to take us over to Komodo and fetch us at a time to be fixed by us. But experience had taught me that it was hard enough to keep three men together and lead them, and I felt that ten would spoil things on Komodo, especially as they would be a great drain on resources and would beg provisions and valuable fresh water from us. I went down to the harbour, Labuan Baju, and after inspecting the craft I was sure that I could hire a better boat with a smaller crew. The ranger was instructed to carry on further negotiations with the village headman.

Red tape was waiting for me at the inn. Wedana, who might perhaps be called the chairman of the district council of Sapi, and the policeman wished to examine my papers yet again. It was probably only an excuse for killing a few hours over a cup of tea, in a different atmosphere from usual.

The boat question was gradually settled. I could hire a fast sailing boat with a crew of three for 700 rupees. She would stay out at Komodo as long as I was there, which gave us a certain feeling of security. The skipper promised to take us across the Sapi straits and round the island to its one village—if the wind was favourable, he was careful to add. It would be high tide at 2 a.m., and that would be a suitable time to start. The boat was loaded under Pranowo's supervision, while I sat cross-legged among the people who were tying up onions in bundles and to everyone's delight

In Borneo the man's hunting is an important part of the family's resources, and as fire-arms are prohibited it is still done with blowpipes and poisoned arrows.

A Dayak adorned with hornbill's feathers, dances a ritual dance in the heavy, humid evening air, amid the chirping of cicadas, the grunting of pigs and the howling of dogs.

The botanical expedition into the heart of Borneo took place in continual rain. The river crossings were, therefore, a serious problem, but the phenomenal Dayak bridge-builders overcame all difficulties.

tried to teach myself the art. In a quarter of an hour I was doing the work more quickly than the natives—a performance which gives no cause whatever for boasting.

The Skipper Blows for Wind

The night was wonderfully cool when two *delimans*, or horse cabs, rattled off from the inn to the harbour with the members of the expedition. The skinny beasts which pulled the cabs were urged on by continual lashing: their sweat glistened in the light of the full moon, while light feathery clouds sailed over the salt pools. The last hundred yards down to the boat were a rough walk among fishermen's huts built on posts. A consumptive cough was heard from behind latticed walls, a solitary cat mewed, a tethered goat bleated. Then the wooden anchor was taken on board and the sail was hoisted by two figures whose faces I could not make out in the darkness. The wind was good: there was a hopeful plashing round the bows.

At last! The voyage over to Komodo, to the great lizards and primeval times, had begin favourably. Was it not really to get to Komodo that I had travelled for thousands of miles, from a country of which none of my comrades on board had any idea? Everything else had been interesting, rewarding, pleasant—but the great varans and their island, with the curiously stimulating name Komodo, were my real objective.

The soreness after the wild drives of the last few days ashore had just begun to subside, but I realized that it would soon return. I lay down on the sharp-edged bamboo stakes which formed the deck, leant my head against a sack of rice and mentally calculated whether we had brought everything with us. I checked with Pranowo that the demijohns of water were filled and stowed, that the two smaller goats were tied up below decks, that the big billy-goat was tethered to the mast, and that all the photographic equipment was packed away in the galvanized iron boxes, watertight and airtight.

I could just make out the distant outline of the volcano Gunung Api. The moonlit clouds were strongly tinged with red above the cone, but the rumbling did not reach us. The volcano had been uneasy for a long time: on my return home I learnt that it had been shattered by a violent eruption and that the whole island, together with its fishing village, had disappeared into the sea.

When the rosy dawn came it was time to take a look at passengers and crew. Pranowo had rolled himself up in a tarpaulin, and I guessed that he was seasick already. (He had been seasick for the first time when I happened

to show him at Jakarta a photograph of the Swedish liner *Kungsholm*.) Mohammad Sidik Abubakar, the interpreter, shivered in the cool morning air. He was dipping into my Malay phrase-book. He wanted to learn English, but unfortunately was making no progress in his studies. In a month he had got no farther than the phrase 'very expensive, Mr. Sven', which he was continually applying to my equipment. The cook Dali Sanurdin Pelajan hardly seemed to have passed a high examination in his craft, and it looked as if he washed once every eighteen months at the most.

The only member of the crew whose name I had learnt was the skipper. He was called Mustamin, a name I shall remember till my dying day, so often was it to be used when abusing the wretched man. I did not hear the older sailor utter a single word from beginning to end of the voyage. He squatted by the mast forward, close to the goats, and both Pranowo and I regarded him as a harmless idiot. The younger sailor, on the contrary, was a lively fellow, with alert bearing and extremely inquisitive. It was he who pretended to paddle our *prau* when the sail drooped.

Just as the outline of Komodo's moon landscape rose out of the sea the wind dropped altogether. Mustamin produced his great shell and blew for another breeze, blew till it resounded far over the sea, but without result. The sailors dipped their paddles lazily in the tepid water, without any noticeable effect on our progress. Black hollowed cliffs rose all round us: salang swallows flew shrieking through the air. Sidik began to say that he wanted to collect nests: there must certainly be many kilos' weight of them in among the cliffs. It was very risky, but it would pay, as the Chinese pay £15 per kilo (2¼ lb.) for this popular ingredient of soup. But his reflections were cut short by a violent tug at the hook which was being towed in our wake. Two men hauled for all they were worth, and a fine mackerel-like fish was brought in, a big fellow weighing over 18 lbs. There was delight on board: even Pranowo folded up his tarpaulin, pale but curious.

The twelve hours had passed quickly: in fact the voyage to Komodo *kampong* was to take three whole days and nights. I saw very well why the giant lizard on the islands had been left in peace, and why the island had acquired such a bad name. The currents round Komodo can attain a speed of thirteen knots. In places the sea bubbled, boiled and foamed like a river below a waterfall. Small boats often disappear, even in calm weather. The current ran roaring and frothing round the bare cliffs, which, Sidik declared, swarmed with snakes. Mustamin blew at his shell unwearyingly, and suddenly it was clear that the weather-god had heard, for the wind

came, so strong that for a moment I was afraid of capsizing. The mast creaked, the bamboo boom projected like a bow over the troubled water.

It proved impossible to round the northern point of Komodo: we had too strong a beam wind and the tide was against us. We tacked for hours without getting any nearer. I was eager to set foot on the soil of Komodo, so I urged Mustamin to go into a little bay, Loho Boko, where we could wait for more favourable conditions of wind and tide. But even to sail into the bay was the work of many hours.

When I was planning my visit to Komodo, men of science and others had warned me against all the snakes which were said to infest the island. Cobras were there, I was told, Russell's vipers and other reptiles dangerous to life. By way of preparation for my landing, I therefore put on long khaki trousers, with stockings outside the trouser-legs, and high rubber boots. Hang the snakes!—I sprang ashore burning with eagerness.

The sand was scorching hot, the burnt grass crackled under my feet. Many of the trees in the little bay had died for lack of water. I made a reconnaissance inland from the shore, expecting to meet a hissing snake ready to strike, or a slumbering varan to wake in the nearest scrub. But the only thing that happened was that two Timor deer gave me a nasty scare. They had sought shelter under a tree from the unbearable heat of the sun, and they sprang up in terror only a yard or two ahead of me and disappeared at lightning speed up a ravine. And hardly had my heart begun to beat normally again when a wild boar appeared and on meeting me swung round so sharply that he kicked up a shower of earth and stones.

But there were no traces of the giant lizard, only a fantastically beautiful sight. A gigantic full moon was rising behind the sharp mountain ridge, and the silhouette of one deer after another was projected as on to a cinema screen, while their cries were mingled with the noise of stones rattling down as the whole herd came down to the creek for its nightly grazing.

That night was one of torment, and I had other things to think about than deer, wild pigs, snakes and varans. About 8 p.m. Mustamin considered that the signs of the weather and his own intuition as skipper agreed in indicating departure. And indeed our *prau* pushed along at a speed of several knots. But on the other side of the northern point the wind rose alarmingly. The sea ran high and beat mercilessly on the old billy-goat. The current was against us all the time, the deck was continually washed by the breakers, and the goats below bleated pitiably. The young sailor rolled himself up in his sarong and hid his face in my plastic bucket.

Sidik looked at me helplessly every other minute, as if begging for my help in quieting the waves. He would not admit that he was frightened,

but he hung his head over the bulwarks and carried on long conversations with the prophet Mahomet. This settlement of affairs, in the course of which Sidik both sang and prayed, lasted for two hours. The queer man who never spoke struggled with the boom and sheet, and while walking unsteadily on the slippery bamboos he put his bare foot into the brazier and burnt the whole sole badly. But not even then did he open his mouth: not a cry of pain crossed his lips.

Mustamin sat in the stern, his knuckles white from his grip on the tiller. For an hour we lay threateningly near the steep cliffs, the breakers at their base shining white in the moonlight, and the silhouette of Komodo was definitely repellent. For the next hour our *prau* was rolling ominously far out to sea. Could the two lights I had seen ahead really be the work of evil spirits? The skipper checked me with a warning gesture when I pointed in that direction. You must not point at the work of evil spirits.

We rode out the storm: when it grew light both men and goats were alive. The billy-goat by the mast was drenched, but he must have been well-fed and contented as well, for nothing was left of our fine papaya. The bundles in tarpaulins were unwrapped and dried in the morning sun, and a school of dolphins showed us the way through the strait between Komodo and Gili Lawadarat. A pair of sea eagles were giving a display of aerobatics between the skerries and the bigger island. A black stork was striding about at the water's edge and picking up crabs.

After a time Mustamin had to blow in his shell again for wind: the heat of the day seemed to consume the breeze, so that a grass fire on a slope in the interior of the island was unable to spread. The crew of the *prau* struggled at the paddles, without protection against the merciless sun. Should we never sight the roofs of the huts in Komodo *kampong*? At any rate we were on the right side of the island, for Flores rose out of the haze.

But at last the *prau*'s bottom scraped on the sand. The elders of Komodo *kampong* had assembled at the landing place and received us with friendly gestures.

CHAPTER 9

There are such Creatures

Has not everyone at some time felt that he was born in the wrong century, or in the wrong millennium? It may be the reading of history that arouses such feelings, or a confrontation with old things, objects which not only seem beautiful to us, but also awake in us an inquisitive longing for times past.

As a child I often looked at books on natural history, full of fantastic drawings of pre-historic animals, reconstructions of the giant lizards whose bones existed in museums. I do not know if I thought the creatures pretty. But that did not matter. Such animals had existed—and why had I not been there, why had I not had a chance of creeping up on them with the box camera of my childhood and taking a few photos of the giants? If I had, the scientists of our day would not have needed to puzzle their heads over petrified fragments of bone, and those drawings which are always suspected of being exaggerations could have been replaced by pictures of the creatures exactly as they were!

One June day of quivering heat and drought we met after all, the boy

with his dreams of primeval times and *Varanus komodoensis*. We caught sight of one another almost simultaneously under the foliage of an assam tree. I felt uncertain—a more pleasant word than frightened—and respectfully took two steps to the right. The monster took two steps to the left with a supercilious air, but we managed to get a good close view of each other.

He more than deserved his reputation as a monster. He was rough and ugly, with many scars on his armour from scraps with rivals and enemies. The great head had enormous jaws: the yellow forked tongue protruded some eighteen inches in front of them in the line of his advance. The heavy body was supported by muscular legs with sharp claws, the tail wound along like a snake's, but only its tip touched the rustling grass. As he crept back under the bushes I estimated his length at nearly nine feet.

When I dared to move again after the surprising meeting, my heart was thumping as hard as it does only when very old dreams suddenly and unexpectedly come true. I had seen one of the wonders of nature, a survival from almost geological history. Not centuries or thousands of years, but millions of years separated me from the creature I had just seen. And how could the giant lizard exist in Komodo, a speck on the map 45 miles long by 12 miles wide, quite a new volcano in geological terms? Certainly Komodo is inhospitable and dry, and does not invite either settlers or visitors. But still—was this varan a descendant of giant lizards which had once swum over from the neighbouring islands of Padar and Rintja, or had they come from the strip of coast on the larger island of Flores, where lizards of the kind to which Komodo has given its name have been observed?

The scientific christening did not take place till some way into our own century, at the famous biological institute at Bogor in Java. Pearl fishers, compelled to anchor by a storm, had discovered the giant lizards in 1910, and the rumour was spread that the dragons of fantasy, as depicted on the old Chinese flag, really existed. Naturalists doubted, as was their duty, till they had a specimen of the lizard before their eyes.

A Portrait Photographer in Komodo

I had intended to set up the headquarters of the expedition in the neighbourhood of the village, partly because I could get fresh water there—the scarcest thing of all in Komodo—and partly because the varans were said to live quite nearby. And when we approached the village we could perceive from out at sea that spring cleaning was in full swing in the *pasangrahan*, or guest house. A cloud of dust and sand hung round the

house. Strange boats did not come to Komodo every day, and a great many spider's webs and plenty of black-beetles had accumulated within the four latticed walls.

Our *prau* was unloaded by assistants, crew and villagers. All were eager to be allowed to carry water containers, bags of rice, boxes containing cameras and films, and the Swedish rucksack. This was a thing that no one understood. I have always carried this practical article with me during my journeys in the Far East, and I have seen it carried in all kinds of different ways—except just the right one. But I have never packed breakable things in it, so that it can be carried pretty well anyhow.

I had expected to require at least three men as porters, guides and general helpers, and began to discuss the question at once with the *kepala kampong*, the headman of the village. His name was Mohammad Nor, and in honour of the occasion he had dressed himself up in his best white shirt and was exercising his high office with dignity. He could both read and write, so a smart fountain pen reposed in the breast pocket of his shirt. His opening phrases made me suspect that he intended to use his authority as an official against me as well as for me. For three capable workers—as he called them—he asked a daily wage of ten times what is usual in Indonesia. Each was to have fifty rupees a day and his food. I replied, quickly and politely, that in the first place I was not an American millionaire and in the second place I could lug my own equipment along if necessary. And that was that!

A packet of cigarettes went round for half an hour, and we came down by degrees to the comparatively reasonable figure of ten rupees a day, with food, if the porters gave full satisfaction, and another present to them before I left. Perhaps some little present to the headman as well. During the negotiations the whole village had assembled round the guest-house: the doorway was packed tight with inquisitive faces. They all demanded cigarettes and presents, and as tobacco is the best means of establishing contact with the islanders, I tossed one packet after another out to the crowd.

When I asked the villagers about the giant lizard or, as they call it, *boaja darat* (land crocodile), an oppressive silence fell upon the crowd. They did not like talking about it. The only thing I succeeded in getting out of them was how many goats the varans had stolen from the *kampong*. The lizards often visited the village and always in broad daylight. They were all convinced that the *boaja darat* was an evil spirit, just as the snakes and the monkeys were up on the highest mountain in Komodo, Gunung Arab. I offered on behalf of the museum at Bogor a large reward to anyone who could get me two or three specimens of the Russell's viper. I

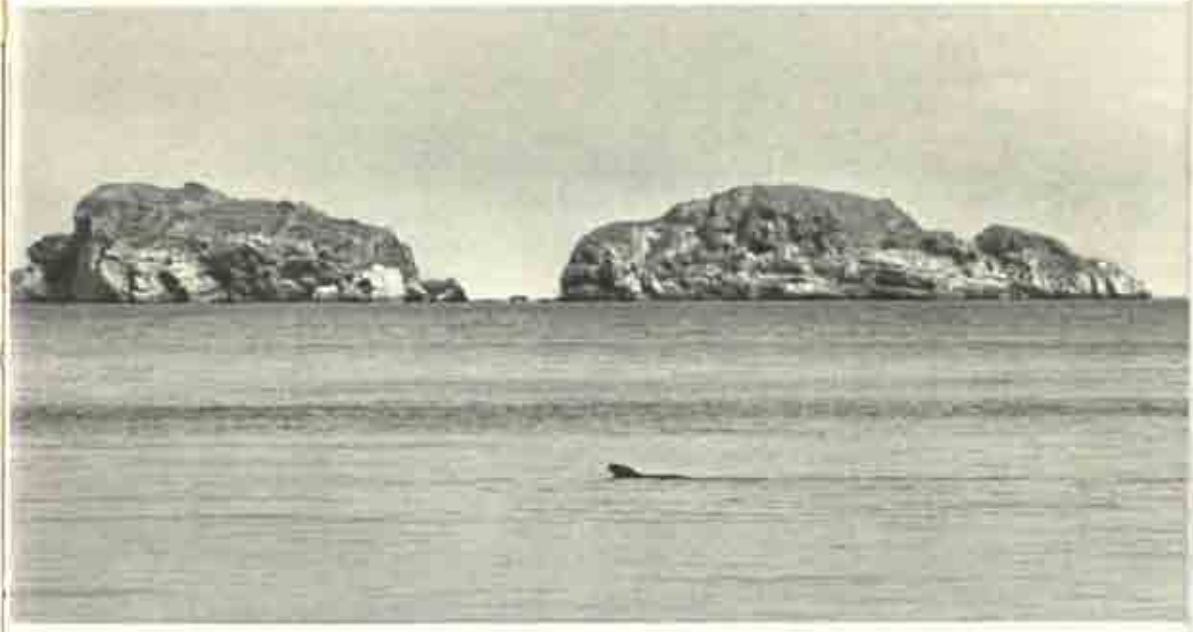
showed them a picture of this swift poisonous snake. Enthusiasm for catching it was slight, but for the reward it was all the greater. All declared that they had seen the snake. But catch it—no, they wouldn't do that!

Sidik and Pranowo agreed with me entirely that it would be absolutely intolerable to have our camp at the *pasangrahan*. The villagers would never leave us in peace, and would certainly beg from us all that we possessed. Besides, the dogs were too many, too mangy and full of sores, so underfed that they would not hesitate to steal from our store of provisions. Sidik therefore gave orders for the reloading of our *prau*. According to the map of the island we ought to be able, if it suited us, to pitch camp in a little bay called Loho Liang, about an hour's sail or punting from the village. It was not too far away for us still to be able to replenish our water supplies as required. The porters we had engaged—Bado, Achmad and Maharam —would accompany us and stay in our camp.

While the loading was going on I took a walk along the village street to improve my acquaintance with my future neighbours. This settlement, the only one in Komodo, originated in a party who were deported thither a long time ago as convicts from Flores. And the island certainly fills the bill as a threat of punishment and a place of deportation—this island of thirst, swarming with monsters on four legs. The convict colonists were allowed to take some women with them, and the *kampong* of Komodo was built on posts, as near the sea as possible.

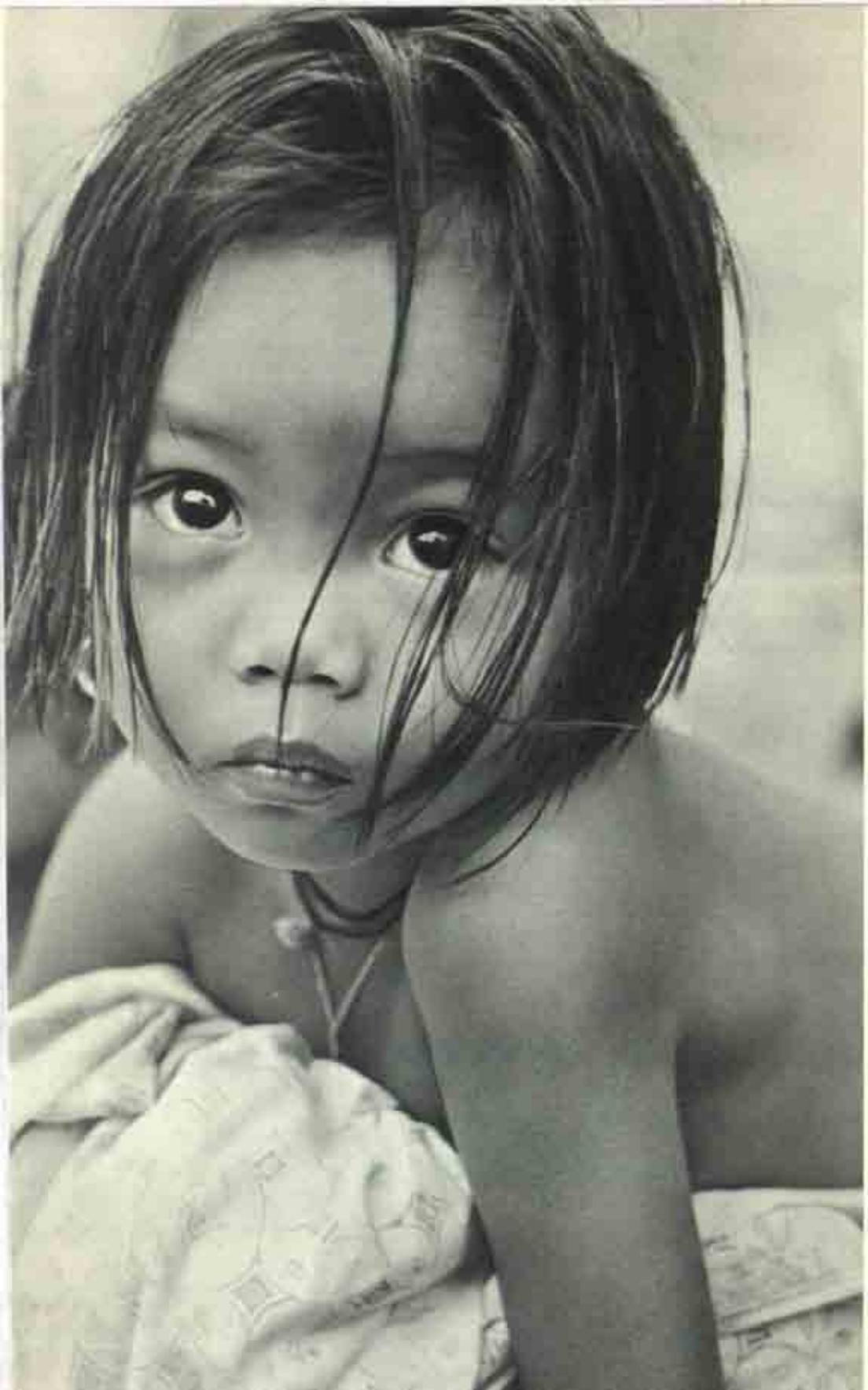
The village consists today of about thirty huts and a little mosque, and the descendants of the convicts of earlier days are certainly as good and as honest Indonesians as the inhabitants of the other islands. But they will always be very much isolated and their possibilities of development are small or none. The village made a poor and mean impression: the whole population seemed slack and degenerate. They keep themselves alive by fishing from their outriggers, but they fish only for the needs of their households—and barely that. I had to wait nearly a week for the five big fish which I had ordered as soon as I arrived. It is impossible to grow rice: the island is much too dry. A few coconut palms and banana trees grow there, and the fish diet can sometimes be replaced by meat when a hunting party has succeeded in bringing down a deer.

The women sat at their primitive looms in the shade under the huts and wove fishing nets of palm fibres for their men. Around them goats, and whole hordes of skinny dogs, panted in the sunshine. The children ran about almost naked, played among the huts or kept a shy watch on the white *tuan* who had come to Komodo to make *gambar-gambar* (pictures)



A varan swimming away from the photographer who ran till he was breathless to cut the lizard off at a cape. Lava islands in the background

Pastoral scene in the alang-alang grass



Above: An egret stalks about gravely on the greyish-black blocks of lava, now and again picking a dainty morsel out of the mud

Left: A pretty child from the Little Sunda Islands

Above: Seven black cormorants in a ring

Below: The white ibises live at close quarters in the tree-tops on Pulau Dua

of the land crocodile. A good many of the charming children were already suffering badly from malaria, which was evidently as great a pest as tuberculosis.

The *kepala kampong* wanted me to take photographs of himself and his family. He brought his rattan furniture out into the open air, put some books on the table, got hold of two of his five children and placed them between the armchairs. Then he persuaded his two wives to come out and seated each of them on a chair. He himself would stand between in an imposing village-headman attitude. One of the wives had gold teeth in her mouth and was ready to part her lips in a smile. The other wife had no gold in her teeth and looked both sour and unhappy. The obliging portrait photographer took two pictures and was immediately overwhelmed with orders, The former *kepala kampong* wanted photographs, likewise the deputy *kepala kampong*. Soon the whole village had collected, by families. But they had no arm-chairs to sit on. They had to borrow the rich headman's chairs, whilst those who were not on the best terms with him preferred to have their *gambar-gambar* taken on the steps which led to the hut. It was a great day in Komodo *kampong*, and I almost dare swear that I am the first and only portrait photographer to practise his art on the island.

Perfume for Giant Lizards

The camp at Loho Liang was the most comfortable headquarters I have ever had. The tarpaulin had been laid on posts under a shady tree right inside the sand. Sidik placed the equipment on a sledge, arranged a little kitchen in the immediate proximity of the camp, and pitched my tent with its opening towards the rays of the morning sun as they first peeped over the mountain ridge to the eastward. Sidik was very anxious to avoid any trouble with his nearest neighbours, a family of gigantic spiders of the genus *Niphila*. The female spider was the big one. She was over an inch long, with long thin legs. The male, on the contrary, was of almost microscopic size and always lived on his wife's back, a precaution against her unhesitatingly eating him up, as she might otherwise do. The net shone prettily in the morning light and was at least a square yard in size.

The surf beat on the sandy beach which extended in a semi-circle round the camp. We had a dry river bed on each side, and along these wild pigs walked down in herds in the evening to hunt for shellfish and crabs at low tide. Up on the hills stood solitary, decorative lontar palms, slender trunks with balls of leaves at the top which rustled in the evening breeze like scarecrows in strawberry beds. From the bush behind the camp rosy-

breasted cockatoos chattered and jungle fowl and brush turkeys cackled: the last-named had a magnificent heap of earth thrown up to protect their eggs only some fifty yards from my tent. Could those eggs have been a delicacy for the varans? At any rate there had been some suspicious rooting about in the upper part of the heap. If the hen brush turkey succeeds in getting her eggs hatched in the mouldy warmth of the heap of earth, the chicks crawl up to the light of day of their own accord, and in only a few hours they are fledged and can manage without the help of their mother, who herself prefers to remain on the ground.

Sleep was not too easy on the first night in the camp. We were practically surrounded by bellowing deer. They were Timor deer, grazing on the few green blades of grass which were to be found in our creek. I understood their restlessness quite well, but Dali did not. He asked if he might sleep with Sidik. He had never been on any expedition before and was firmly convinced that evil spirits were abroad in the camp.

In the early morning I went out reconnoitring, to place the first bait. Sidik was my guide and bush-cutter. Pranowo was to protect us against snakes by knocking about with a long stick. We had not been going along the dry river-bed for more than a quarter of an hour when Sidik nearly ran his head into a green tree snake, two and a half feet long, which lay dozing on a branch. He was terrified and refused after this to go first in the file. I took the lead in his place and kept a good look-out. But that was the first and last snake I saw in Komodo.

We crept through bamboo thickets, wriggled through dense low scrub, and beat our way along through scorched alang-alang grass three feet high. We got our bearings with the help of large deciduous trees in whose tops wonderful orchids grew in clumps. But we did not see a varan. They do not as a rule come out of their holes in the earth or rocks till about nine, when the air begins to get really hot. Out on an open scrub-covered field the tracks of deer crossed one another, and dried rutting holes showed that the field was a popular resort for the deer during the mating season. The landscape was rugged, with hills and lontar palms against a blue sky. This should be an ideal meeting-place for my cameras and the giant lizards of Komodo.

After three hours' work, which left us bathed in sweat, we had erected a platform about three feet above the ground, a solid square with a surface of two square yards, under a tree which resembled a myrtle. I intended to make the dead goat fast with a chain at a distance of 12 yards from the platform, and the grass round this spot was carefully trampled down so that the varans, if they now condescended to show themselves, might be

seen properly and the view not obscured by the high stiff grass. We camouflaged the platform well with palm leaves and grass, so that we could be fairly sure that it was impossible to see into it.

When we returned to the camp with dry throats and dripping with sweat, Dali the cook was sitting in a tree up which he had fled. Did he imagine that we were varans? Sidik made him come down at once, but Dali, speechless, pointed into the brush. The land crocodile had been up to the camp and had half killed our goats with fright; it was, of course, the goats it had been after. Clear tracks proved that Dali was not lying: the varan had crept forward to a point only about ten yards from the kitchen. This was a good sign, and Pranowo and I looked pleased, which made poor Dali more depressed than ever.

Sidik was told to slaughter the old billy-goat. We were to keep a bone and the liver for ourselves: the rest Sidik and the others dragged away to the place by the platform, where the carcase was hauled up into a tree. The belly was slit up: the stench from the rapidly decomposing goat's body should be allowed to spread through the neighbourhood for a couple of days. A delicious perfume for giant lizards. . . .

At sunset I walked along the shore towards the 'moon mountains' east of the camp. The hermit crabs were beginning to come to life: everywhere their tracks wound down towards the water's edge. Their snail-shell houses are not standardized: shapes and sizes change, colours and patterns have endless variation. As soon as they heard my footsteps they became motionless, the claws were drawn into the shell and barricaded the entrance. Then, if I stood quiet for a little while, the claws began to move again and the tentacles were straightened out, the eyes surveyed the situation and the walk continued. But as soon as it gets dark the wild pigs come out of the bush, which makes the crabs' existence extremely insecure.

I had filled my pockets with pretty shells and was admiring their shape and coloration while resting on a fallen tree-trunk. The air was cool and lovely, the surf beat gently on the beach, the breeze was caressing. A few queer wili-wili birds, stone curlews, came walking along and stopped within ten yards of me, so that I could observe them at my leisure. One lay down in the sand to rest while the other kept guard. In size and colour they reminded me a little of our shelduck, but the legs were as long as an avocet's and stronger than those of the best fighting cock. Blue wing-feathers shimmered in the last sunlight, the bill was disproportionately large and straight. I never saw more than this pair in Komodo, but they showed themselves in the neighbourhood of the camp pretty often and

were never shy. They were not inclined to fly, but preferred to run along the shore. I managed to take a whole series of pictures of the stone curlews, and when I rose a trifle carelessly they showed every sign of surprise and then loafed along in the same direction as myself.

They took wing, however, when a whole family of wild pigs rushed out of the undergrowth grunting. I quickly crept down to the edge of the beach, and soon I had boar, sow and three little pigs rooting at my feet. My scent must have been tickling their nostrils, but only the boar looked up now and then, gazed at me, grunted and raised the hair on his neck. But then he returned to his interesting dredging work on the edge of the shore: his hunger for fat crabs, shrimps, oysters and water worms was too insistent for a bare-footed human being to be able to distract him.

Wild pigs and deer, which occur in great numbers, are probably the giant lizards' main quarry. And these two meat purveyors have nothing to fear from the people of Komodo. The people are Mohammedans, so they may not eat pigs' flesh, while it is difficult to hunt the deer with the weapons available. The civilian population of Indonesia are not allowed to possess fire-arms. A few deer and young wild pigs can possibly be hunted down with the help of the wretched dogs, but the inhabitants of Komodo are too frightened of the *boaja darat* to venture into the country, which is really rich in game. So both nature and human conventions have arranged everything for the best, so that the last giant lizards on earth may really have a prospect of survival.

I had appointed Sidik personnel and cigarette manager. When I returned to the camp late that evening he had dismissed my three assistants from the Komodo *kampong* and appointed a new man, or boy, who possessed the short but pithy name of So, a muscular type with a head of hair like the worst kind of scrub. I really thought So looked a little brighter than the fellows we had dismissed, and we could certainly manage with only one man in future.

'*Tuan*,' said Sidik, 'those three *orang-orang* were no good! They only wanted to beg food and cigarettes, and they refused to go and fetch water. And, *tuan*, very, very expensive *orang-orang*!'

Evil Spirits in the Mountain

Gunung Arab, the high mountain, attracted me. As I intended to let the stench from the goats' carcase spread for another day or two, I decided to ascend the mountain. Seen through my glasses it looked as if it was covered mainly by bamboo woods: there must certainly be both monkeys and

wild buffalo up there. It is said that there was once a handful of Arabs in Komodo—Gunung Arab means the Arab's mountain—and that there are relics of this settlement on the slopes. If so, the wild water buffaloes would be wild descendants of the Arabs' tame cattle.

To make Pranowo and So really interested in the enterprise, I had told them stories about mountain climbing the evening before and, moreover, promised them a rich reward for their trouble. Pranowo was not difficult to persuade. So was more sceptical as to the justification of such violent exertion. Anyhow we started long before sunrise, with full water-bottles, sweets, boiled rice and a jar of salt meat in our rucksacks. I myself carried the cine camera on its stand over my shoulder. Pranowo took charge of the Hasselblad camera, and So was delighted at having the glasses on a string round his neck. He was proud of such a mark of confidence.

In the ravines round the dry river-beds the ground was very difficult, with cumbering low vegetation and prickly bamboo thickets. Sometimes we were crawling on all fours along the wild pigs' well-trampled tracks. Up the mountain-sides we followed relatively accessible deer tracks and when possible avoided going out into the insidious *alang-alang* grass. The ground under the grass is quite covered with rubble, blocks of lava, and it is very easy to sprain one's ankle. The boys kept up well when marching, which had to be slow if we were to endure the heat of the day. So hummed to himself as he went along. Was he, perhaps, afraid of snakes? During our rests he clambered up the smooth lontar stems with the agility of a monkey: he cut off a bunch of young bluish-black nuts with my Mora knife and threw it down. The meat is juicy and cool and quenches thirst. Now and then a trio of pigeons fluttered over our heads, and a white sea eagle cruised over the bay, which lay far beneath us shining blue, not disturbed by a ripple.

In the copses where we rested after the sun had risen and begun to make us hot, we invariably scared away a herd of deer which had sought the same shelter as ourselves. The sharp dry grass, withered for months past, had a smell of burning.

When the day grew hot it was time for the varan to leave his hole. The first showed only his dragon-like head, which stuck up grotesquely at least three feet above a patch of silvery grass-heads. The distance was not too great for me to be able to distinguish clearly the big veins under the throat. The creature opened its jaws for a moment, and that was enough to bring So down. He sank down into the grass as quick as lightning and dared not look up till he was certain that the dragon had run away. It did

so audibly: it swung round and lashed its tail so that grasses and pebbles rustled. It was as if swallowed up by the earth: I could not find it despite the closest search. Presumably it had crept down into some hole in the ground.

So was trembling like an aspen leaf when we continued our walk, and I had to encourage him with a piece of chocolate and a few extra cigarettes. Pranowo was in good heart and recorded his observations in great detail. During our next rest he drew an excellent sketch of the meeting with the varan.

We found the first varan's cave under a large rock. Broad footmarks in the weathered earth at the entrance showed that it was inhabited, but presumably the owner had already gone out for the day: at any rate we did not hear a sound from inside while resting on a rock close by. It was a cool rock in deep shade, with a lovely view of the mountains. The top of Gunung Arab was hidden by clouds, which made the plan of going up on to it more attractive than ever. But I began to doubt my comrades' condition: the speed of our walking had lessened considerably after meeting the varan.

So cannot ever have been so high up on a mountain before, or so far from his village. I hoped that the nervous thumping of his heart would be lessened by the wonderful views he was getting through the glasses. The landscape which spread out beneath us, far into the distance, was marvellously beautiful. Some of the mountains had a soft undulating outline, with well rounded tops, while others were harshly inhospitable, like vastly magnified stone pillars. And between the mountain chains lay the valleys, once richly clothed with trees and bushes and another of the savannah type, with isolated lontar palms or one solitary deciduous tree. Here and there were the grey beds of rivers, dry as a bone.

After a further very hot walk of an hour or so I suddenly caught sight of a narrow silver strip which ran perpendicularly down a black rock and disappeared into a narrow cleft. Could it be water? We tried cautiously to get down the slope, although we lost height by doing so. And it was water; its plashing could be heard a long way off, filling the air with what sounded like the gentle beating of wings.

The sides of the ravine were very steep, but we had no difficulty in getting down. For that matter, from the heights everywhere deer tracks led in the same direction. Although we crept along with the greatest caution, the alarm was always given in good time, and the animals rushed panic-stricken up the slopes. Their hoofs brought down stones, dry leaves crackled, twigs were broken off, antlers carried away branches. So

stood petrified. Pranowo thought we should not advance too quickly. If there were wild buffalo among the animals there, no one knew what might happen. The wild buffalo is a pugnacious fellow, and even if it seldom attacks in open ground it would be wise to be careful. Evidently we had a water-hole ahead of us to which the animals resorted in the middle of the day to quench their thirst and find shade. The vegetation was luxuriant down there.

The narrow silver strip of water was collected in a little pond, or rather two, one above the cliff, one down below in the clay. Over the ponds hundreds of salangs flew, small swallows which hunted insects and dipped their beaks in the clear water. The whole area smelt of deer and buffalo and wild pig, as rank a smell as in a goat-house.

Curiously enough the ponds swarmed with fish and crayfish—fish as big as small herrings and crayfish like the largest we get in Sweden in August. We all three jumped down into the crystal-clear water and had no difficulty in catching with our hands enough for a whole dinner: we gathered our catch in a plastic cloth, used normally to protect the cameras, and then we had a refreshing cold bath. From the lowest pond the water vanished straight into the ground: only ten yards away the stones and earth were quite dry.

We never got to the top of Gunung Arab: my companions could do no more. I was thinking that I had not more than a couple of hours' walk to reach it when I discovered that I was alone on the slope. I rested, panting, for a quarter of an hour under a tree with small white orchids climbing up the trunk, waiting for the boys to catch me up. In half an hour I began to call out their names, but got no reply. There was a dead silence: the intense heat stifled all sound.

After five minutes' walking downhill I met Pranowo. He excused himself by saying that he had had to wait for So, who was lying asleep by a lontar palm rather lower down, completely exhausted. Pranowo translated his excuse:

'*Tuan*, it isn't a good thing to go so high. Evil spirits and monkeys and snakes and *boaja darat* keep the mountain, and I daren't go any further.'

'But you can see that I dare!'

'Yes, certainly, but the *tuan* will leave here afterwards, and then it will be I whom the mountain will punish. And my wife is expecting a child. It may go all wrong with her and the child, if I disturb the mountain.'

The argument ended there, up against that wall of superstition which no one could surmount. I should have liked to leave Pranowo and So where we were and have gone on to the top alone, but the risks were too

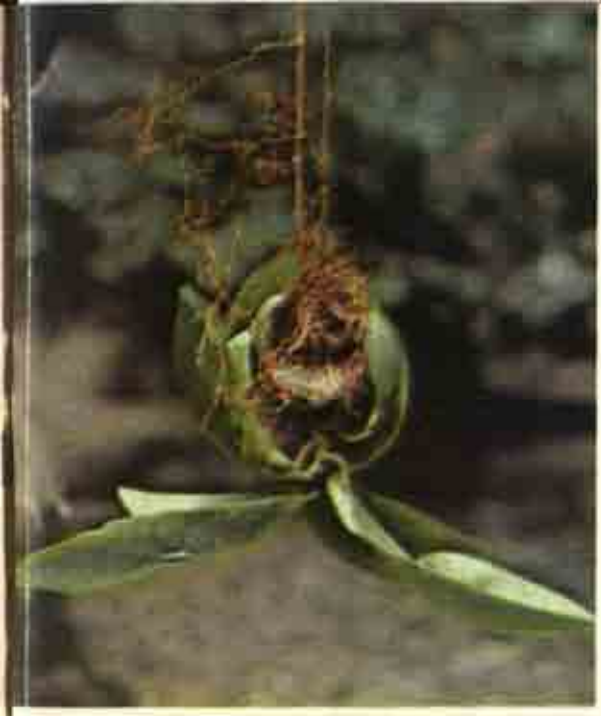
great. If I happened to break a leg or injure myself in any other way up there, no one would ever dare to look for me. No one would think it strange if the *tuan* disappeared: a thousand causes could be given. That is the disadvantage of being a white man alone. The Dayaks in Borneo had had the same point of view and given the same reasons. The powerful spirits of the mountain must not be disturbed.

The return journey was harder than the ascent: the heat was now unbearable, and we had perspired so much that we were worn out. I had to carry all the equipment to get the boys down from the mountain at all, and even then they were continually tumbling down. We took many rests, but it was only with the help of another giant lizard that I managed to keep the three of us together. I was walking a couple of hundred yards ahead of Pranowo and So when it happened. They put up a slumbering nine-foot varan and it fled in the direction in which they were going, not knowing that I was ahead. I was nearly run down: even the draught from the tail nearly threw me to the ground. The varan ploughed a broad road through the grass, but I managed to get the camera up and take a good shot before it disappeared. They disappear astonishingly quickly: one feels that their holes lie thick on the slopes and that they always know just where they are.

After this adventure Pranowo and So kept close to me, dead beat as they were. And, like tired horses on their way to the stable, they gained fresh strength when they saw the camp. The stench from the goat struck our noses, and I made a detour past the platform to see that all was in order. The goat's carcase was still hanging there, and it had been effective. Trampled tracks led towards the platform. Despite the now horrible smell we approached the bait. Pranowo thought he detected a movement in the top of a tree—yes, there on a branch lay a little varan, a good three feet long! It did not get down in time. So sprang out of the way, but Pranowo and I succeeded in catching it with our hands without its having a chance to bite us. A grip round the neck and one round the tail were enough to enable us to carry our first pet back to the camp in triumph.

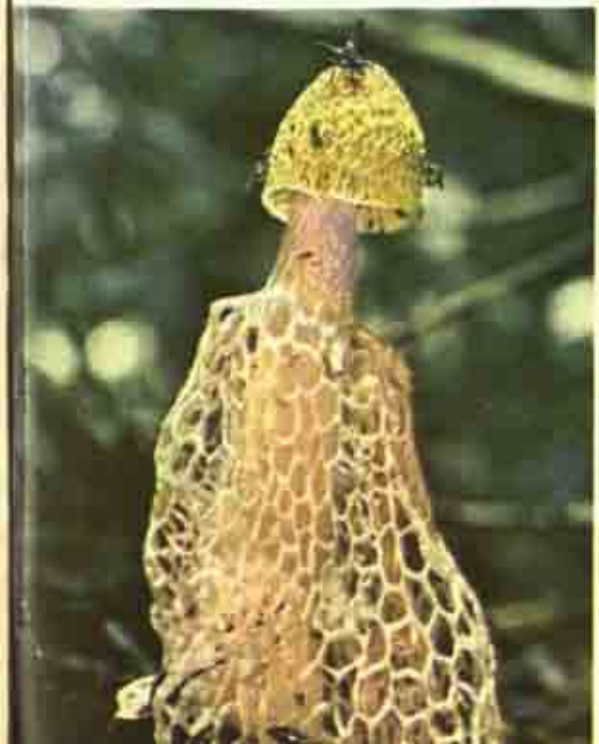
Even So thought it was amusing, and in the camp we were greeted with jubilation by Sidik and Dali, who harnessed the baby giant with a cord and tied it to a tree. During the rest of our time in the camp the young varan became our pig-bucket, which gratefully received all uneaten scraps of food.

I had a crayfish banquet that evening all by myself. They did not taste as good as Swedish crayfish, but that was all because it was not August, nor moonlight.



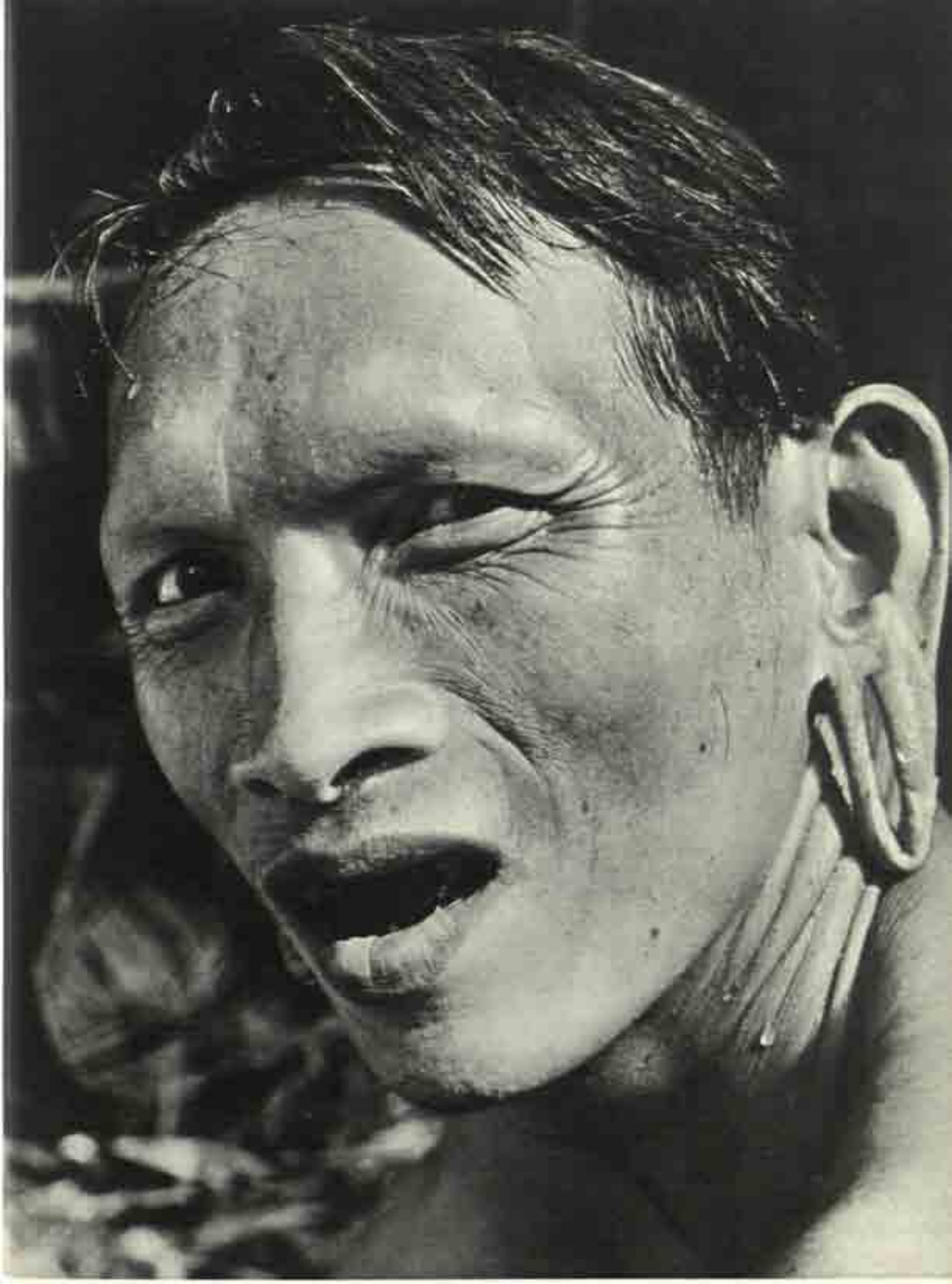
Symbiosis, common life, between termites and plant. The insects are allowed to enter the leaf cluster and pay the rent by giving the plant nourishment with their secretions.

RIGHT: The comet-like finger orchid was one of hundreds of representatives of the fantastic flowering beauties of the jungle, hidden in semi-darkness.



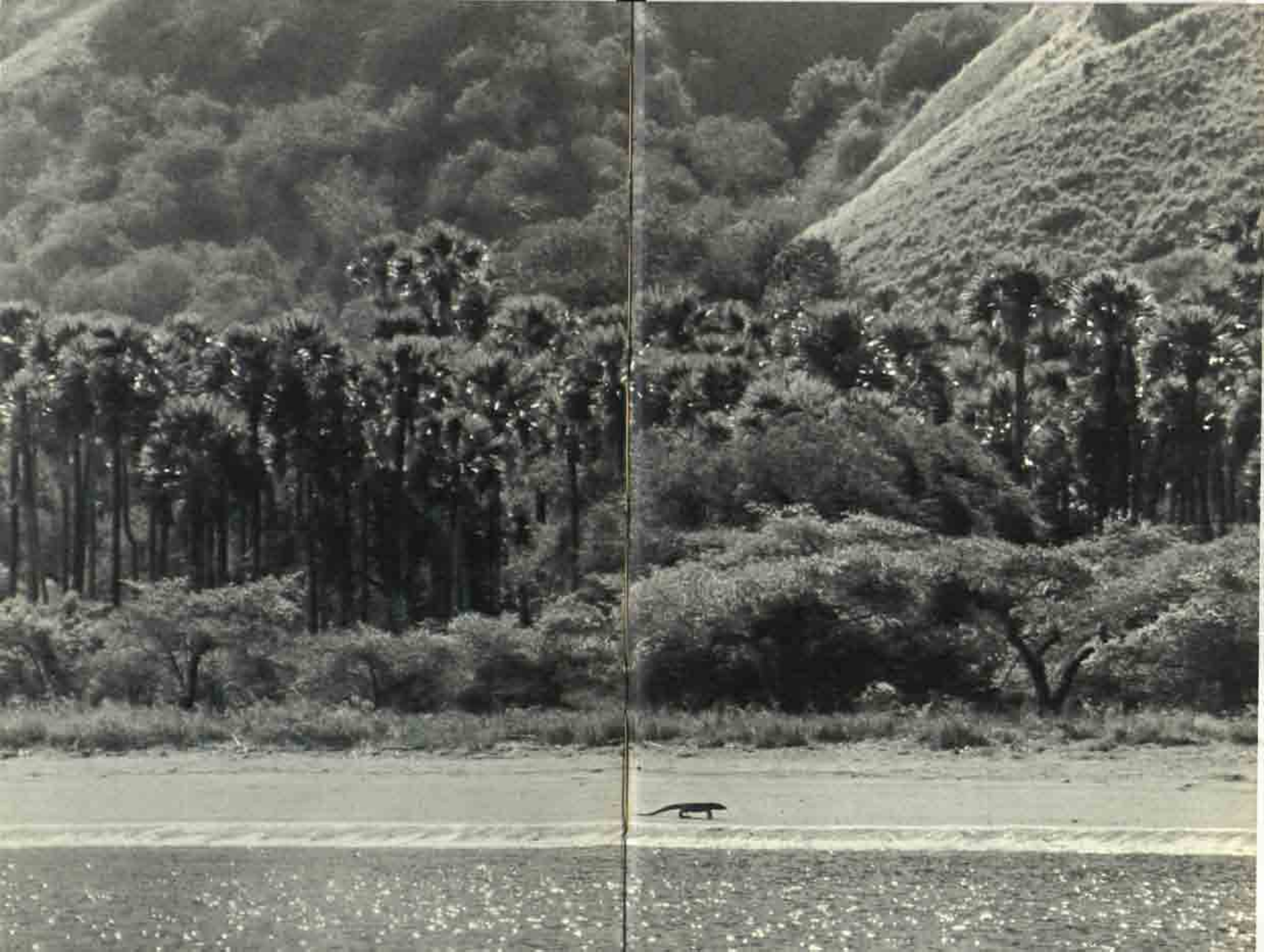
The 'veiled lady' is what the English call this horrible smelling fungus, the spores of which are spread by carrion insects.

Mustamin, the Komodo skipper, blows into his shell for wind — and his prayer is granted beyond measure.

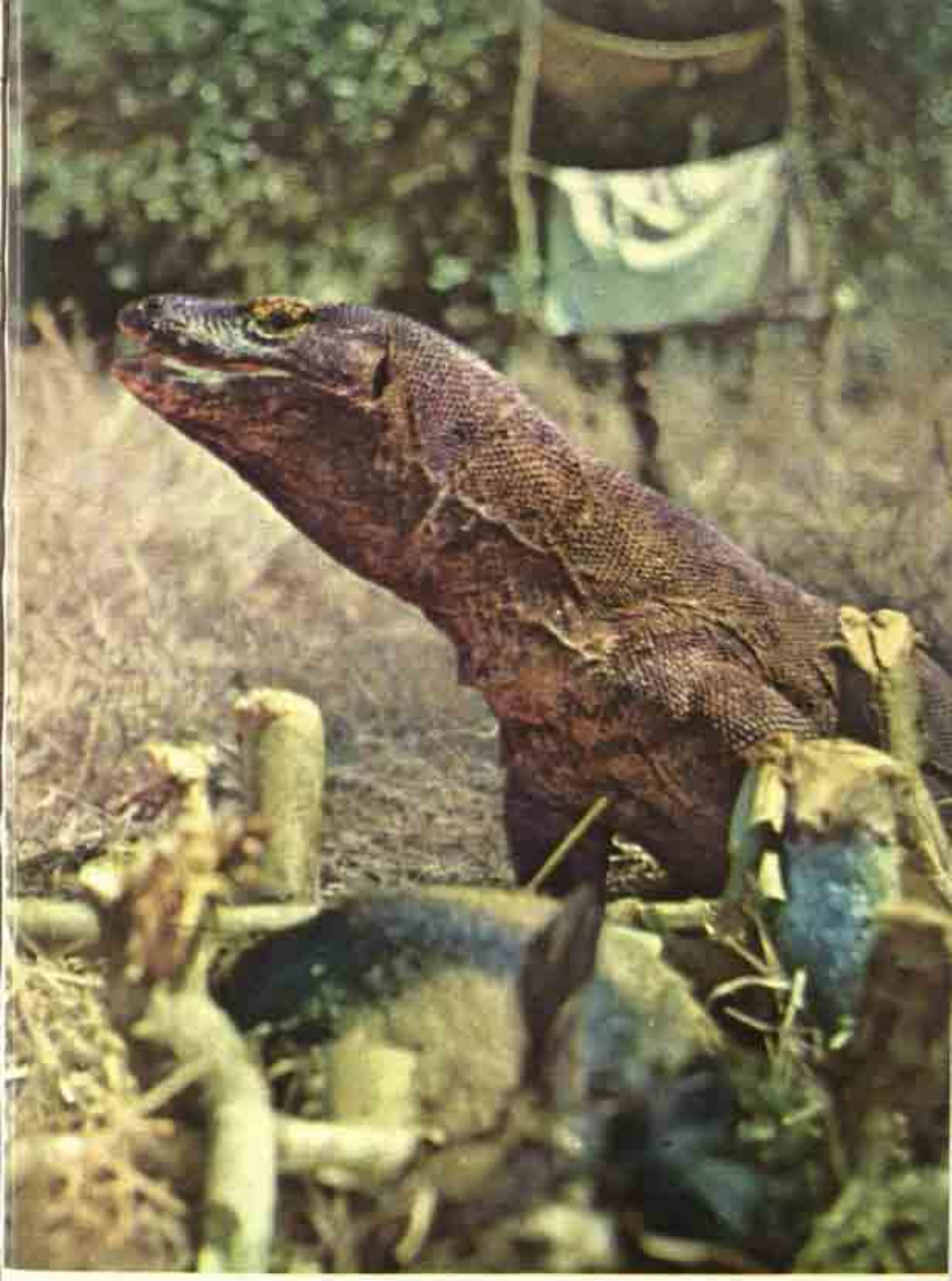


Above: The Dayak porter Apok has sacrificed the gold rings which lengthen his ears to get his wife what to Borneo women is the loveliest adornment—gold teeth. He himself had none

Overleaf: A vision from primeval times—a giant lizard on the shore of Komodo



The giant lizards of Komodo were a cock and bull story till fifty years ago, when a Dutchman (the first white man to see them) confirmed their existence



Where the carrion is, there the varans gather together! This giant lizard has been attracted by a putrid goat's carcass. Photographer's shelter in the background.

The spoonbill, consul-general of the bird community on Pulau Dua, turns his back haughtily on the photographer.

I had been warned against all the dangerous reptiles in Komodo, but came across only one snake, the green tree snake, harmless and pretty and peculiar as being the only snake with a horizontal pupil.

GIANTS' MATING

The first sunrays were glistening in the dewdrops on the spiders' webs when Sidik, So, Pranowo and I were ready to set out for the expected meeting with the giant lizards. I had intended to remain sitting on the platform all day, and to enable me to survive the heat Sidik had brought with him a whole bundle of fresh coconuts. Although it was early in the morning, the boys expected to meet a *boaja darat* behind every grass stem.

Slowly and cautiously we approached the stinking carrion, over a mile from the camp. While I was arranging myself on the platform Sidik and So hauled the goat's carcase down from the tree and fastened it to the ground with big slats and stakes. The stench was almost unbearable, but I hoped that my nasal organ would soon cease to react. When all was ready our helpers were ordered to return to the camp and not show themselves again till the afternoon, when they were to go to a hillock nearby and wait for a sign from me. Pranowo stayed with me on the platform, where we tried to make ourselves as comfortable as the circumstances allowed.

The shadows of the trees crept nearer and nearer to the trunks, the heat rose from the *alang-alang* grass: butterflies in hundreds fluttered round the carcase and imbibed its juices. They were not honey and nectar . . . Then a rustling began in the undergrowth round our hiding-place; the rustling went on for hours, till the dragons' heads rose peering out of the waist-high sunburned grass, and then sank down again like targets at rifle practice. On the platform the atmosphere was tense, and Pranowo and I spoke to each other in whispers—a rather unnecessary precaution seeing that science maintains that the Komodo dragon is stone deaf. Does he suffer from the consequences of volcanic eruptions for thousands of years past?

The first varan which dared advance without any concealment was a sensation which fully satisfied my requirements, although he was less than five feet long. Three other young varans came up to the carcase and managed to tear off a few bits of skin. We now had four specimens in front of our camera lenses, but they were all rather nervous and often held their heads stretched out towards the open ground behind them, but never towards the platform.

The tussocks of grass to our left were pushed aside. An enormous head was raised slowly, as though pushed up through a trap-door. Another head, right in front of us. The young lizards were seized with panic and fled into the bush in terror. Pranowo shrank behind my back. There was deathly silence on the stage as the star actors entered: I heard my wrist-

watch ticking. For several minutes the great dragons' heads were as though petrified: only their long yellow tongues went in and out. They were taking a good look at our hiding-place: their sight is said to be keener than a deer's, and a carrion-eater's nose is certainly no worse than his. But they could hardly take any notice of any scent from us when the delicious smell of the decomposed goat's body was tickling their noses and gums.

There was a rustling as of a man going through frozen reeds when the first varan advanced stiff-legged towards the goat and made a circle round the carcase, investigating and snuffing. Its tongue ran over the carrion, and then a thud was heard as the varan sank down on its belly with its back to our hide. The other stood as motionless as before, against a background of badly weathered rocks.

It was a prehistoric scene. It was a drawing from the natural history books of my childhood. I mechanically followed all the creatures' movements with the telephoto lens.

First come first served—this rule seems to hold good among giant lizards too, for the ten-foot varan by the goat tugged and tore at the strips of skin, looking for a good opening into the carrion. Then whole lumps of the goat's body slid down its throat, the juices dripping from its yellow jaws. If the carrion had not been so securely fixed the varan would probably have swallowed it whole. Its jaws are inarticulate like snake's jaws, and the stomach juices are so strong that they can digest bones and hair.

But the real delicacy seemed to be the goat's intestines. When the first varan forced its whole head into the dead animal's belly, the other took the opportunity to approach, and soon they met nose to nose. They stared each other angrily in the face for a little while, and then went for each other with wide open jaws. A contest of giants, the everlasting battle for food fought between primeval monsters. But the latest arrival made a quick about turn and retreated into the grass. Was he defeated, did he not dare to join battle again? Yes, he came back, the aroma was irresistible. . . .

And the more satiated the larger varan was the more peaceable he became. At last they were sharing out the titbits in harmony. But the younger and smaller lizards might not take part in the feast till the two big fellows had withdrawn to the shade of a tree to rest and belch.

After the breathless tension of the first hours Pranowo and I now began to talk freely, and we no longer sat crouching on our platform and whispering. We yelled and shouted at our actors, but they paid not the slightest attention. It is not only human beings who are made comatose by a big dinner. Pranowo and I had to content ourselves with cutting a few coconuts in half and quenching our thirst with the cool milk.

As a rule, the varans have to hunt their prey, even though, naturally, they sometimes have the good luck to come upon the body of a large animal before insects and other vermin had devoured it. Of course they lie in wait when the deer are calving, and no doubt many wild piglets also find their way into those huge jaws. On one occasion from a hillock I watched a varan through glasses as it lay in the grass, waiting near a grazing hind with two calves. Nothing happened that time, but I am convinced that the varans can bring down fairly big animals. If they lie quite still till a deer approaches at a convenient distance, they can deliver a blow with their enormous tails, knock the quarry off its legs and then kill it with their jaws. Their speed much surprised me, but nevertheless I do not think a varan could overtake a deer or a wild pig. On the other hand, it is easy for them to hide in the long grass, and the colour of their armour does not show up against the background of scree. If they have filled their stomachs with a regular blow-out, they can then, just like other reptiles, lie dozing in their holes for several days.

The two big varans went on feasting all day till only fragments of the goat remained. After a time Pranowo and I had left the platform and broken off our filming, and were now resting under the nearest tree. Suddenly a rattling and clashing of armoured skins began. Another fight? Had repletion given place to anger?

Not at all! One urge had been satisfied, and now it was the turn of another. Pranowo and I witnessed a pairing of the two giants. The larger climbed up on to the smaller, which was darker in colour. The male scratched the female's head and neck with one fore-foot and its sharp claws. She sank down into the grass, and soon the male had his fore-legs on both sides of her neck. He lay over her at a slight angle, moving his tail in sudden jerks. Primeval times were creating a future.

The cine camera recorded the varans' wedding, which lasted half an hour, with a couple of rolls of film. Then the two giant lizards withdrew into the bush, in different directions. Hunger and the mating urge were satisfied, the drama was over.

'Mr. Land Crocodile'

Sidik and So came to the observation post a good hour too late. Pranowo and I imagined that they had been secret witnesses of our scene and not dared to intrude so long as the varans were still there. But the cause was quite different. There was a real spirit of rebellion in the camp. Sidik had been instructed to see that Dali always kept himself clean. A minimum demand was that he should wash his hands before he began cooking. Now

Dali was by heredity and from unchecked habit a regular pig, and he did not fully understand what Sidik meant. He therefore received a first-class 'telling off' from Sidik and took it so badly that he ran away from the camp into the bush.

Sidik himself had to boil the rice and look after the fish which the crew of the *prau* had killed with a charge of dynamite in the water—a form of fishing which is forbidden in Indonesia as elsewhere. This increased burden of work did not lessen his anger. But he had no choice: he had to go out and hunt for Dali, and after searching for an hour or two he found him asleep up a tree. I do not know how he punished the cook, but when we came back to the camp Dali was sitting sulking behind a tree. Sidik had rubbed salt into the wound by withholding Dali's cigarette ration. Soft-hearted as I am, and unwilling to have discord in the camp, I made Dali promise to use soap a little more vigorously in future. And then I gave him a few cigarettes, while Sidik snorted contemptuously.

When we had spent almost a fortnight at Loho Liang we struck camp. Our pet, the young varan, was untied and allowed to return to freedom. But he was now so accustomed to us—and to the food we gave him—that at first he simply lay down, looking greedily at our only remaining goat.

Our *prau* was loaded at high water. Our equipment was now increased by several pounds of pretty shells and a few boxes full of orchids, which Pranowo wanted to take back to the botanical gardens at Bogor. When we punted out of the little bay a white egret was chasing a black heron along the shore. A red-gold Brahminy kite dived and took a fish injured by the dynamite explosion, and when the sail swelled out Pranowo caught sight of the second serpent in the Komodo paradise, a water snake about six feet long which swam away rapidly.

While our water containers were being filled in the Komodo *kampong* I paid off So, who was now leaving us. He had done his job well, and he wept for joy when, besides his wages in cash, he received some underclothes, a shirt and some toys for the child which his wife had presented to him while he was working for us. No doubt his wife was pleased too. So had collected all our discarded tin pots, which were a welcome addition to their kitchen equipment. He thanked me for himself and his family, with Sidik as interpreter.

The *kepala kampong*, having first turned his wives and children out of the hut, offered us coffee in glasses. He stamped our passes with gusto, wrote out a permit for us to leave the island and generally speaking emphasized the authority of his office. Then we had to write our names in his visitors' book, a dog-eared blue note book. As a symbol of my gratitude for his

help and hospitality I handed over to him a piece of steel with a red handle, which he immediately put inside his shirt for fear that one of the villagers might rob him of so handsome a present. Compliments and assurances of friendship continued until the moment when I embarked.

We set sail and our *prau* went swiftly ahead on a course for Loho Shrikaja, a large bay on the northern side of the island. According to the villagers *boaja darat* swarmed there, and were much larger than those on the side where the village lay.

Mustamin, skipper of the *prau*, had hardly put the shell to his mouth before a fresh wind came; in less than ten miles we had rounded Komodo, and Loho Shrikaja bay was opening its rocky jaws to us. A school of flying fish was sailing against the wind ahead of us: a long-legged varan was parading on the white sand along the semi-circle of the bay. In the thick wood of lontar palms clusters of leaves shone where the light fell on them: ravines ran down from the horizon of brown grassy hills like the wrinkles in a half-open fan.

The varan strode on with dignity towards just that part of the bay where we meant to land. When we were about 100 yards away it caught sight of us and sat down, with head and neck stretched upwards. Then it rose, sauntered on quite undisturbed at the same easy pace as before, and suddenly sat down again. We were now not more than 30 yards from the varan. When the keel scraped bottom I jumped out with raised camera and waded ashore. I ran up towards the edge of the scrub to get pictures of the varan and the bay with its black lava cliffs as background, and also with the object of preventing the creature from taking refuge in the wood. The sand burned under my bare feet: it was too loose for normal running. And yet I did run, like a madman . . .

To my astonishment the varan did not run away; it did not even increase its speed, although I was 15 yards behind and on one side of it. Instead, it went out into the water and dived. I stood there panting, not fully realizing what had happened. I glanced at the second hand of my watch, but its revolution was too short. Not till two and a half minutes had passed did the varan come to the surface again and lie there floating, with the whole of its body visible. It swam with sinuous movements, like a sea monster, towards one of the rocky capes at the end of the bay. Then it dived again. I tore towards the point as hard as I could. Swarms of crabs tumbled down among the slippery stones on the rocks: the sharp-edged shell formations cut my feet to pieces, and bloody rents were torn in my legs. Panting, I dragged myself up on to a high boulder and got a good view over the bay, but before the varan came in sight again I had fumbled

in changing the cassettes. A cassette went splash into the water at the moment when the sea monster appeared just below me—after a long dive of over four minutes. The varan posed for me at a distance of eight yards, making snake-like movements in the water: then it swam slowly towards the cliff and disappeared into the rock below me. There was an echo of rolling stones inside a hole.

I remained sitting on the boulder, completely exhausted, both by exertion and excitement. My cuts, soaked in salt water and full of sand, hurt horribly. But the unique pictures in the camera would have to compensate me for all my pains and aches.

A spreading assam tree gave shade to our camp by Loho Shrikaja. The remaining goat had been tethered and watered after the long voyage. But its hours were numbered: we had grilled goat's liver for dinner.

The country here was not at all like that at Loho Liang. The lontar palms grew in copses down on the plain: the river bed was edged with an almost impenetrable bamboo undergrowth. Flocks of pretty pigeons cruised over our heads, cockatoos scolded at us, their yellow crests standing on end with rage. The scrub was full of rustlings. Was it wild pig, deer, varans or only jungle fowl?

The slaughtered goat was hoisted up into a tree to hang there, but here we did not trouble to build a platform. The camera would, if needed, work upwards from a small hillock where we erected a simple screen of foliage. The wind sung low in the tree-tops, while the distant swell hissed an angry descant.

I woke at dawn with a lump on my forehead, and I remembered having felt a sting in my sleep, from an insect which I had brushed away. Pranowo complained of a painful ankle: it was swollen, and he declared that he had been bitten by a scorpion. I laughed, with perhaps a touch of patronage, but he would not give way till he had examined the whole tent. He hauled out the camp beds, but found nothing suspicious. Out of my sleeping-bag, on the contrary, there tumbled a scorpion two inches long. This was not very pleasant, and poor Pranowo at once began to complain that he had a temperature and felt ill. A couple of strong tablets put him right, and my 'bee sting' went down of itself. The scorpions in the Indonesian islands are pretty harmless—not nearly as dangerous as their relations in the deserts. But the natives have a great respect for them.

Over by the bait a queue was forming already. Two small varans hurried away from the tree where the goat was hanging, while an old ten-foot beast was lying in the grass where the carcase dripped, with its jaws watering. Not till I squatted in front of it about four yards away did it

move off slowly, lashing its tail. The goat was hanging safely: I counted optimistically on having a visit next day from the biggest varan in Komodo, one which could get at the hanging goat and need not content itself with the drops that fell from the rich man's table.

After a refreshing bathe on the lovely beach I went for a stroll up the river-bed like a tourist, in shorts, a shirt worn outside, and light shoes. The instinct of the chase which the camera always arouses was so strong that I could not help creeping along, and was soon completely involved. A cautious pattering, like the footsteps of large animals, was heard from the bush. It could not be deer, it might be wild pig, but as there were large heaps of stones here and there, I thought it was varans. Perhaps a varan just outside its hole?

The light wind was blowing towards me, and the possibility of following the sound without being scented was attractive. Everything on the ground was so dry that it rustled. I had to consider each step I took, but nevertheless I was soon quite surrounded by scrub. The sound ahead of me had not died away, and I was now sure that it was a varan. But I could not make progress: thorns, rattan and bamboo undergrowth with long spikes barred the way. I crawled on all fours, wriggled along on my elbows yard by yard, followed wild pig tracks, swearing quietly to myself. Jungle fowl cackled derisively. The noise I thought was varans had died away and it no longer interested me: I only wanted to get out of the scrub, which threatened not only to tear me to pieces, but to suffocate me. I had no notion in which direction the sea or the river-bed were.

A wretched business, losing one's bearings like this. Nervousness began to torment me. Strangely enough I saw no climbable trees, but after a couple of hours I had a definite feeling that I was going uphill. Sometimes herds of wild pigs rushed away in panic—I should have liked to have done the same myself! At last, in a steep ravine, I escaped from my misery, shattered by my new and dearly bought experience of a new aspect of Komodo's defences against intruders.

It was five hours before anything more happened at the bait. Pranowo sat with me in our leafy shelter, waiting. The goat's carcase was not so well fastened this time: it stank too horribly even for Sidik. Not till we were half dazed by copious perspiration and had dozed off in uncomfortable attitudes did Pranowo nudge me. A little varan was advancing and almost brushed against our shelter, while another raised its head over a heap of stones. We drove them both away by throwing stones.

Then he came! With dignity, as became the king of the tribe *Varanus komodoensis*, an old armoured giant strode forward. Greedily he seized the

goat's head in his jaws: quick as lightning he tore it off and a piece of the neck as well. He raised his head and let the huge lump slide down his throat: and his head was motionless, his eyes staring at a few trees on the slope.

He was not the king of the varans, he was crown prince at most. Colossus number one approached from the trees, and the other withdrew down the valley. The giant revealed his whole length quite openly without taking any precaution. We gave him at least 11 ft. The sepia-coloured armour hung in folds on his underside, and deep scars were visible on his neck, wounds from battles with rivals or with big game he had brought down.

He bit a lump from the goat's rump with a violent snap of his jaws and then slit up its belly with the long claws of his great fore-foot. He took no notice at all of our presence, so I thought I ought to try to get some close-ups. When the varan's head disappeared into the goat's belly I hurried forward, leaving Pranowo sitting behind as though petrified. The varan stared at me for a moment or two, but then plunged his head into the carcase again. I took pictures at a distance of three feet, and the varan made no attempt to attack. Only when I wanted to take a low photograph crouching down did it stiffen its forelegs and raise its head. As soon as I rose it seemed relieved, and I had a feeling that when I crouched down the varan thought I was disputing its prey. It disappeared while I was changing the film in the camera—and then nothing was left of the goat's intestines. The varan had no doubt eaten all it could and was now going off into the shade to digest its meal in peace and quiet.

Sidik and Dali waved to me from a hillock near by. They were to help take down the carcase and carry the equipment home. But at the last moment it occurred to me that the remains of the goat might be used next day as well. I might be able to get some shots down on the shore, pictures of Komodo dragons in movement, with the sea or the mountains as background. I had had to pay too much for the goats, so why waste anything?

But no one was willing to throw the rope round the stinking remains, so I had to do the job myself. I pulled hard, and just as I was laying the rope over my shoulder there was a rustling behind us. The big one, the king, was coming back! He came with long strides, with confidence and purpose in his gaze. Pranowo rushed back to our leafy shelter, Sidik and Dali flew up the nearest trees like monkeys, leaving the photographic equipment to its fate.

'*Tidak bagus, tuan*' (Not good, sir!) they yelled in chorus.

A pangolin takes a melancholy view of existence over a root of a giant tree in the jungle

Ambulatory leaves, male and female, out walking. These leaf-like insects move very slowly by day, but very quickly at night

Left: Eat or be eaten! This female spider has defeated a praying mantis: the terrified male clings to her behind to escape the mantis's fate.

Overleaf: A Garden of Eden (with no man in it) on the world's most densely populated island, Java. It is called Ujung-Kulon. The animals are Timor deer.

Blood and sand and whirling passion—cock-fighting in Bali

Well, we were old acquaintances, we had met face to face before, so I stayed where I was. The monster strode straight to the end of the rope and closed his jaws with a crash on the goat's ribs. He stood there dragging hard, getting purchase with his forelegs, while I dragged at my end. Neither side would give way in the grotesque tug of war. I bellowed to the trembling Pranowo:

'The camera! 250, 8 to 10 metres. Press the button, please!'

He managed to take three shots. Even if they were not quite sharp, these pictures would still be evidence of something which otherwise would certainly be dismissed as a traveller's tale.

The varan did not give way till I got hold of an empty coconut and—a cowardly act—flung it in his face as hard as I could. Then he let go, glared indignantly at me, as much as to say 'So you fight with nuts, you poor thing!' and made off.

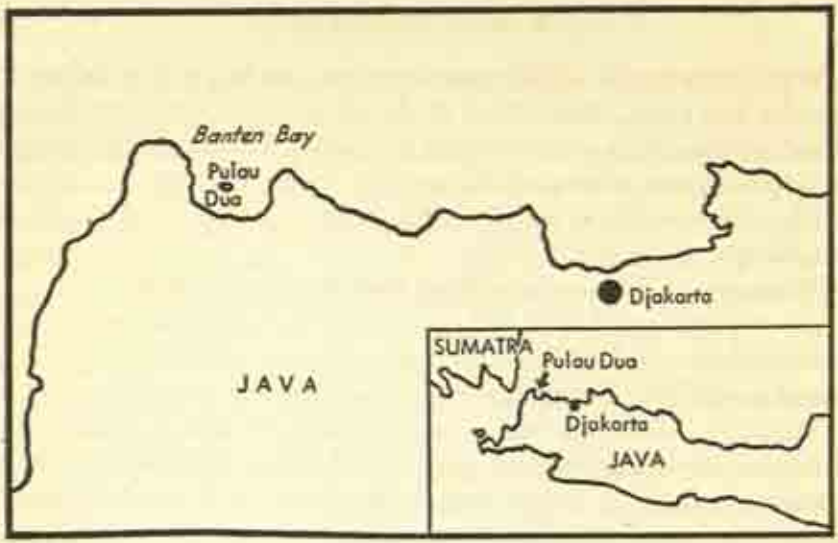
After this I received the title of honour—or nickname?—of *tuan boaja darat* (Mr. Land Crocodile).

It was sunset on my last evening in Komodo. I went up on to a grassy height a mile or two from the camp to take leave of the island alone. The evening breeze was blowing through the dry grass, which glittered like a golden diadem in the last sunrays that peeped over the ridge. I sat down by a lontar palm with my back against a stone. The sea was royal blue, with black rocks, the clouds dark grey and red. The lower the sun sank the whiter gleamed the sand of the little bays. Clumsy shapes emerged from the darkness of the undergrowth—wild pig looking for crabs on the shore at low water.

In the blue twilight a herd of deer came across the grassy level—six large Timor deer with two playful calves. The hinds grazed the poor grass, while the calves worked off the collected surplus energy of the day and played together awkwardly. A couple of stags were fighting, roaring as they do in the mating season.

I have never felt myself so much in harmony with life as then, in that evening hour on the giant lizards' island. Nature had bestowed a rich gift on me: I had been allowed to see a dream of childhood become reality, to live in primeval times, far away from human good and human evil.

Skipper Mustamin blew into his shell: wind, wind! And the wind came and the sail was filled, our *prau* rushed forward over the boiling currents of the Sapi strait, so swiftly that Sidik thought best to commend his soul once more to Mahomet, the prophet of Allah. . . .



CHAPTER 10

A Winged Community

On most maps it is not marked at all. On the detailed map sheets of the Indonesian Forestry Service it is marked as a little black dot. Only the fishermen who work round the island, and sometimes take their nets ashore there, know the clayey mangrove-covered shores. It is of no interest to anyone else, and its modest name suggests that even the Indonesian authorities consider it almost worthless.

Pulau Dua, Island Number Two, is its name, and it lies a couple of hours in a sampan, with a light breeze, from the *kampong* Karang Antu in Banten Bay in Western Java.

Man did not find it worth while to till the soil of Pulau Dua, and then the birds took over the island, for there is good fishing water round it. The whole of Banten Bay is so shallow that fish fry flies over the wave-tops in dense schools. The water is so shallow that long-legged birds can wade in line and feed on the schools. The island has therefore become a breeding-place for between forty and fifty thousand white-breasted and black birds, which build their nests there and bring up their young in the low trees. The trees which form the densest carpet of foliage are not

more than from six to ten feet high, and none of the trees are over twenty feet. On the eastern side of the island the mangrove swamps and tidal water form small lagoons, where in bad weather the birds climb about and pick up crabs, shrimps and frogs.

The area of the island is only 25 acres, and its highest point is only ten feet above sea level. Pulau Dua is one of the world's chief bird islands as regards both total numbers and the number of species: not even the guano islands of Peru or the Norwegian bird cliffs can compare with it. It is a similar concentration round the equator which makes Java the most thickly populated island in the world.

A Pair of Exclusive Aristocrats

When the sun was sinking behind the misty blue volcano, Gunung Garang, eight men punted the blue and red sampan out of Banten Bay. Bells tinkled up at the masthead, reminding me of sleigh-bells. The carved dragon in the bow pointed towards the wreck of the Dutch corvette which was sunk there in the second world war by Japanese suicide pilots. Around us flocks of egrets and ibises filled the air with sound as they returned with full maws to their hungry babies in the bundles of twigs on the island. Single birds came in undulating flight from the mainland, birds which had been collecting building materials and may have taken rather too long a doze. The evening breeze came, and then the men laid down their poles inside the bulwarks and hoisted the sail, which filled and swelled like a gigantic bird.

At a distance Pulau Dua's green parasol seemed to have been whitened by birds, and when the sampan's keel scraped against the dead coral on the shore and we were able to have a closer look at the birds, we thought the whole island was painted white. The mangrove crabs fled into their holes, and the hermit crabs withdrew into their shells. Our equipment was unloaded. The path up to our quarters wound through a tunnel of greenery, and at every step we disturbed hundreds of egrets. They fluttered in fear above their nests, and the draught from their wings made some of the eggs fall over the edges of the nests to smash against the boughs of the trees. Some of the birds emptied their maws above us, while the young ones stretched their bare necks inquisitively over the edge and stared at our bundles. One is definitely an intruder on a bird island.

The Indonesian nature protection authorities have made Pulau Dua a reserve. A watchman's hut has been erected in the centre of the island. The three watchmen who do duty here all the year round had withdrawn to a little hovel, so that I and my helpers obtained admission to the other

two rooms in the hut. And yet there was barely room for us and our equipment.

There was an observation post in a tree quite close to the hut, comfortably equipped and not unlike the Swedish air observation towers. The best view over the island was to be had from it. Every square yard of ground was white with birds' breasts, which were brilliantly reflected in the evening sun, and until all the birds had gone to roost thousands of voices formed a bubbling chorus of song.

When I had got my bearings on the island and had formed an idea of where the different species had their favourite spots for building their nests and for hunting, I had photographers' hides arranged by my helpers. Just inside the rocks by the shore, where the cormorants used to sit and sun-bathe after fishing, we arranged a well camouflaged hide of boughs and leaves. Another hide was put up among the long, tangled, treacherous mangrove roots, and from this we had a view over the lagoon, where the egrets waded in the mud. Unfortunately the colony of white ibises lived in undergrowth through which it was hard to find a passage. At least fifteen pairs had crowded their nests together in this place. It took us a whole toilsome, painful day to set up a bamboo staging on a level with the tree-tops. When we had fitted the brown tarpaulin to the four corner posts, we camouflaged the tent with sprigs of foliage. All the time we were working the flock of ibises sat in the nearby trees observing us, but the young birds pressed themselves down as deep as they could into the nests.

The bird world of Pulau Dua could very well be divided into the same social categories as exist in our own—so let me present at once the leading man on the island, the spoonbill! Only one pair of spoonbills was breeding on Pulau Dua: they had made their nest of rough twigs in the middle of a colony of white ibises. Of course they lived on the top floor. A bundle of dry seaweed lay round the hollow of the nest.

The family had recently been increased by two downy babies which could not yet stand on their legs. Seldom was more than one of the parent birds at home, and it was hard to tell whether it was the cock or the hen, for they were exactly alike, with the same snow-white plumage. They carried their heads high, and the long neck-feathers contributed to their distinguished appearance. The bird gets its name from its flat bill, but I think that the bill is more like a long black shoe-horn than a spoon. The plain, granulated black of the bill also covers the front part of the head, contrasting effectively with the white streaks over the eyes. The spoonbill certainly makes a most aristocratic impression.

The bird which was at home had the task of keeping order among the ibises. If they happened to come too near the shoehorn flew out, and its aim was accurate: I am sorry for any bird it hit. The neck feathers rose, the whole bird was a picture of watchful indignation. Homeward bound ibises might not come into the spoonbill's air space while circling to land: if they did, the spoonbill stretched out its neck and struck at the intruders with clashing bill. When all around was quiet the spoonbill spread out its wings to protect the young birds against the sun.

If the fishing out in the bay had gone well the cock or hen bird returned after only an hour or so: it flew in at a great height and circled down in spirals towards the nest. The circles grew smaller and smaller, and just before the bird landed it braked suddenly, its wings beat and the tree shook under the pressure of the long-legged bird as it sought a foothold among the twigs. The bird which had been keeping watch now left at once, and the young ones stretched out their necks for food. The young bird's bill is not shaped like the adult's: it rather suggests a pigeon's bill, and when being fed the young bird thrusts its bill and head far down the parent's throat. The irritation makes the spoonbill throw up the half-digested food in suitable helpings. The largest of the young birds—the hen lays her eggs at intervals of three days, and they hatch at the same intervals—is fed first and therefore always gets the food which is least prepared. The feeding goes on thus day after day, the parents relieving each other. But the young ones grow quickly. Their bills soon acquire the characteristic spoon shape, and flying practice on the projecting edge of the nest begins.

Snobs of Different Kinds—and Thieves

There was a touch of aristocracy about the hundred odd pairs of Tantalus storks which bred on Pulau Dua. They did not live together: each had chosen a suitable area for itself. The nests lay wedged between the cattle egrets and other egrets' nests, but I often saw the storks standing up in the highest trees, especially when they foregathered socially of an evening.

They made an impression of having exhausted most of their subjects of conversation. Silent and meditative, they observed life around them with the exalted calm peculiar to the nobly born. They displayed their dignity for hours on end. From a distance they could have been taken for marabou storks, but when one came closer one saw at once what injustice would have been done to these noblemen. The Tantalus is a very clean stork, in contrast to the marabou, and it is handsomer. The slight curved yellow bill, orange at its base, the long white neck, the long slender legs, the impeccable black Sunday clothes with equally impeccable linen, the general

refinement of his demeanour, made one place him unhesitatingly at the head of society. The Tantalus stork is a cool beauty who allows nothing to impress him and who moves high above the other ranks of the bird world.

It was a long time, too, before he let me see anything of his life. He made me sit in the bird tent for eight unbearably hot hours. The two greyish-white young birds in the nest were almost full-grown and were being fed irregularly, with long intervals. But solitude did not seem to worry them. They quarrelled on the edge of the nest and wobbled about dangerously near the abyss; they came near killing themselves several times a day. Their flying exercises were so far advanced that they shot up high above the nest, bouncing up and down, and when one grew tired another relieved it and went on flapping and fluttering.

The dandy of the community, the dude among the birds of Pulau Dua, once saved me from an outburst of ill-humour down in the mangrove swamp. I had been squatting for the whole afternoon in a lightly constructed hide among the mangrove roots, but not a single bird had come within range of the telephoto lens. The tide was flowing in and rising higher and higher up my legs: the hungry hordes of mosquitoes that appear at sunset had found me and were attacking me without mercy. The evil-smelling water and the itching of the mosquito bites were too much for me, and if I had had any of my assistants handy and could have got help in dealing with my equipment, I should certainly have given up.

It was then that the dandy came strolling along the water's edge. He stepped along with dignity on his thin legs, as if afraid of wetting his feet. The straight sharp bill pointed down from the long tube of his neck. Something in his look told me that he was hunting for a delicate supper, something to round off the day with.

The dude, the smart man, concerned above all with appearance and prestige, anxious to preserve his sober, timeless elegance, through all changes of fashion, and alert to note exaggerations in others—that is the purple heron. He was prettier than I had dared to hope, having only seen him till then in pictures. He is no boaster; he knows what is suitable and never oversteps the limits of good taste.

Now he was standing scarcely ten yards from me, quite motionless. He had caught sight of something in the water and was so concentrated on his quarry that he did not even notice the rattle of the shutter of my camera. As quick as lightning his bill plunged down into the mud, and just as quickly it came up with a mussel. The bird jerked its head and the mussel was gone: I could follow its journey by the swellings that appeared

in the heron's slender neck. The purple heron is usually the shyest and most watchful bird in all Pulau Dua. The snake-like necks stick up like periscopes out of the foliage, but the bird never lets its whole figure be seen by the nest.

Other members of the community were the egrets, greater and lesser, which were spread all over the island in uncountable multitudes. They used to sit for a long time at sunrise cleaning their already freshly starched white clothes. Their behaviour was strictly gentlemanly: they never quarrelled, never disturbed their environment. Their offspring, on the other hand, had not much of their parents' refinement: the young birds were as ugly as the grey heron's, and that is saying a good deal. If I happened to get under any of the grey heron's nesting places, they always tried to mark me with a rain of slimy vomit or a jet of guano. It seemed incomprehensible that the well-conducted egret could thrive in the proximity of the grey heron.

The air vibrated with white wings, wings with blood-red bands on the undersides, when three porters and I splashed out through foul knee-deep mud to the bamboo staging where I was to remain to study the ibises. There was absolute panic in the ibis families' nests: clearly they felt themselves mortally threatened. They stretched their long black necks over the edges of their nests, pecking agitatedly at the disturbers of the peace.

When the porters had disappeared and I had crept into the narrow tent, the birds felt safer and calmed down. But they were still suspicious and kept a close watch on the bamboo staging. Out of sheer nervousness they settled on boughs too weak for them, lost their balance, flapped their wings violently and scared the whole colony up in the air. Before me lay at least fifteen nests, worked into each other. Those nearest to me were empty: the young birds had moved to the farther edge of the colony, where the nests were now crammed with white downy babies crawling over each other. The half-grown trampled down the small, and the sensation I had caused gave me a bad conscience. In just a few nests three or four dirty white eggs still lay.

But only one of the grown birds had to settle on the edge of its nest and call the young ones with a gurgling throat noise, and the very smallest ventured back to their right homes. Young birds that did not belong to the nest were chased away with beak and claw, while the real children clamoured for food.

The white ibis's profile cannot be mistaken for that of any other bird. The bill looks like a long bent stick and appears to be made of black sand-blasted cast iron: the head and neck are equally black and have no feathers.

The breast plumage, feathers which hang loose, is tinged with brown when the birds return from the mud-baths of their hunting grounds, but is washed white every day. The body is quite white, while the tail feathers spread out in a black flounce. The legs are coarse and thick and resemble props. The young bird's neck also is black, but is covered with down till it is full-grown.

A night heron came stealing through the boughs under the ibis colony, presumably hunting for eggs or for newly-hatched young birds. He is an unwelcome visitor, and when he happened to come up on to a level with an ibis's nest he was immediately attacked by nearly full-grown ibises. The night heron dived back into the undergrowth to stick his head up again soon afterwards at another place. But the ibis colony was soon on its guard, and the thief retired ingloriously.

Egrets also came stealing up, but with other intentions. They were out to carry off building material: the egret does not care for making the journey to the mainland, and the resources of the island itself are tied up in all its nests. Suddenly an unguarded nest begins to shake: slowly but surely a twig is pulled out of the structure, and the thief makes off with his booty to his own nest. This explains the fact that one of the parent ibises always remains at the nest while the other is out getting food. They relieve one another every three hours, and a guard is kept from sunrise till the clouds of night gather over Banten Bay.

Down the Social Ladder

The reverend priesthood used to stand on a higher social level than the bourgeoisie, at any rate in old times, but in the bird community of Pulau Dua it has had to yield its pre-eminence. At any rate the cormorants had no power worth mentioning over souls, although their garb of blue-black, shining priests' robes gave them an exterior that inspired respect. The cormorants did not care to mix with herons, egrets, ibises or storks: they had built their monasteries in the leafiest trees and lived there in strict, self-chosen isolation. When the cormorants were out fishing the others must have had ample opportunity to steal young birds and building material. But it was very seldom that birds of any other species dared to settle in the cormorants' trees.

The cormorants had their best fishing waters just off a few small creeks. My assistants had, therefore, constructed a hide quite close to the beach. I had counted on sitting there unoccupied for several hours, but I had only waited for a quarter of an hour when a dozen cormorants braked so sharply just in front of me that the water flew round them in clouds. After a quick

look round they dived, disappeared for a few seconds, came up and dived again. They kept together in a bunch all the time and moved off in an even line.

They fished for about an hour, and then they had evidently made an end of the school, for they turned towards the land one by one and came up on to the stones of the beach just where I sat, scrambling out of the water at its edge or bouncing forward over the low wave-tops. Soon all the cormorants were sitting in a group on the stones sunning their full stomachs. They puffed up their feathers, cleaned them and shampooed themselves with fat from the glands of their skin till their dark cloaks shone.

The peasant class might be said to consist of the lesser egret, the black ibis and the cattle egret. They were present in great numbers all over the island: their nests were thick even in the cactus scrub; evidently the birds had no difficulty in avoiding the long sharp spikes. The cattle egret is the lowest in rank and has to content itself with the worst nesting-places. It is partly orange in colour. In the rice-fields of the mainland the cattle egrets can be seen sitting on the backs of the water buffaloes, snapping up flies and keeping the buffaloes clean, for their clayey hides are full of eatable insects. From the buffalo's back the cattle egret has a good view of the frogs and mantises which it enjoys eating. Unfortunately it brings a good many vermin with it to Pulau Dua, and that is perhaps why it is despised and ill-treated. The cattle parasites come in the cattle egret's plumage and spread to other species of birds. The mortality is high, and in many cases it has been established that the cattle egret has been the carrier of the bacilli. Every day I found birds which were the victims of parasites. They lay on the ground, reduced to skin and bone, helplessly awaiting certain death.

The lesser egret's family life seemed rather irregular: every family had its own almanac. I came across parents who were teaching their children to fly, while other pairs were being attacked by their already fully-fledged young. The young birds had still not learnt to get food for themselves, but forced the old ones to throw up their supper: the parents had therefore to make an extra trip over the sea so as not to go to bed hungry.

In one nest a hen bird was sitting on eggs; by another a cock was performing a fiery courtship dance for the object of his affections. His neck was writhing in rhythmic movements, his fine plumage swaying and vibrating: the bird was shaking and quivering all over with passion. He pirouetted on scarlet legs from bough to bough, circling round the hen, who was certainly deriving as much pleasure from the courtship as I from the display.

But still the black ibis was the island's greatest beauty. It is superb: its

bearing and demeanour are instinct with correct, almost conscious dignity, its flight is graceful and charming both when it flies alone and in V-formation. It visits its favourite resort at sundown. Then the birds collect in a few wild papaya trees from which foliage has been worn away long ago.

The bird's name shows that it is related to the white ibis, and the shape of the bill is the most striking family characteristic. Apart from this, the birds do not seem to have very much in common externally, but zoologists base their classification of the animal kingdom on other and more fundamental observations than can be derived from a mere glimpse. The black ibis comes well out of a comparison with our handsome avocet: it is rather larger, but has the same pretty fusiform body, and its legs are just as long and thin. But there the resemblance, either to the avocet or to the white ibis, stops. The plumage has a metallic sheen—brown, red and green—especially in the evening light, when it flashes and shines like jewels as soon as the lively bird moves. At any distance the general effect is black.

The black ibis devoted at least half an hour to its toilet every morning, and then it might have to wait for another half-hour before the organized food supplies expedition started. A party came along in obvious disorder and circled over the island again and again. They were gradually joined by other birds from every direction, and when enough travellers seemed to have been collected the huge flock rose higher and higher. While rising the birds assumed a perfect V-formation and set their course for the mainland. At this time hundreds of greater egrets had already begun to fish and were driving the day's first school of fish towards the shore. They flew in line and drew a net, to use the fishing term which first occurs to me.

In a vast assembly of birds such as this there is of course also an unclean, ostracized caste. The problem child of Pulau Dua is the night heron. He is a plague to the other species: he combines in himself all the bad qualities a bird can possess. When I sat watching by a nest, I often saw him come creeping along under the lowest tier of nests. Evidently he could not bear the revealing daylight: he shunned publicity. He stopped from time to time to take his bearings, and if he caught sight of an unguarded nest containing eggs, he climbed quickly up to the edge of the nest, snatched an egg and swiftly vanished. If the first attempt succeeded the thefts were continued till the nest was empty.

But on one occasion the gangster's plan miscarried. He had discovered an ibis's nest in which a day-old chick and an egg on the point of hatching lay unguarded. He managed to grab the egg without being caught, but to seize the young bird he had to show himself above the edge of the nest. The adult bird was there in a twinkling and set on him with beak and

claw. The young bird was already struggling in the night heron's bill, but the rain of swift fierce blows compelled him to drop his prey. The ibis chased the night heron away in a wild pursuit that went crashing through the branches.

Pulau Dua was patrolled every morning by the forces of law and order, consisting of a pair of sea eagles, a few white-headed brahminy kites with transparent reddish-brown wings, and the black-winged kite, which always perched in the only torraka on the island, up on a sandy ridge in the eastern corner. The patrols caused no alarm among the thousands of waders, although they all certainly knew what the birds of prey were after. None of them really expected to find themselves in their claws, experience having taught them that eagles and kites almost invariably attacked injured or sick birds: and that these should be cleared out was a very good thing.

The scavengers of the island seemed lazy and easy-going, and as fat as old-time butchers. The varans did the job, and they were well fed, for there was a good supply of dead birds, chicks which had fallen out of their nests, and eggs. They did their work so well that nothing decomposed in the heat. I observed this one morning when I had found a desperately sick cattle egret struggling on the ground. I passed the place again five minutes later. There was nothing to show that a tragedy had been enacted there but a few marks in the loose earth. Feathers, bones and wings—all had been swallowed.

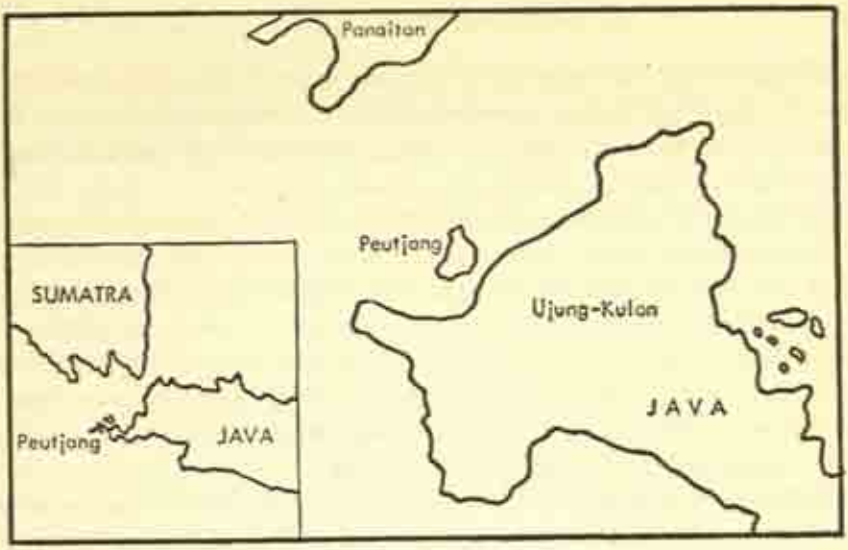
The night workers came up out of their holes at about 8 p.m. They scrabbled about round my feet at every step I took, but fled as soon as the light of my electric torch revealed them. Hermit crabs can weigh nearly a pound and they carry their big snail-shell houses on their backs. They draw back swiftly into their shells at the slightest sound and block the opening with their single deformed claw. When the crab is walking over masses of leaves the deformed claw is prominent: it is moreover an excellent weapon of defence. The hermit crab can easily nip off a man's finger: one is well advised to keep out of range of it. Sometimes a party of crabs quarrel over their booty. The shells crash together, the claws shut like rat-traps, and the noise of the fight can be heard a long way off.

I had put off saying good-bye to the paradise as long as I could: I wanted to stay as long as there were any grains of rice left in the bottom of the bag. But at last the time came when I saw the pair of spoonbills quarrelling with their neighbours, the white ibis families and the purple herons' necks, for the last time. Flocks of egrets hung like hovering angels in a western sky which displayed all the loveliest colours of a piece of batik.

Someone struck a gong: the bells at the masthead jungled melodiously. One of the crew twanged the strings of a mandolin, and another began to sing. Then the signal for departure was given, and I had reluctantly to go down to the sampan.

Out at sea we saw flocks of black ibises and cattle herons in V-formation steering in towards their roosting places on Pulau Dua. The parties of cormorants stood out as if sketched in black ink against the sky to eastward, where gloomy-looking cloud banks were beginning to form. Now and again flashes of sheet lightning lit up the thousands of white birds' breasts in the nesting trees. Egrets, white ibises, Tantalus storks, all the white-clad members of the Pulau Dua bird community sent us a last greeting while the foliage of the island was sinking into the sea.

Island No. 2 is insignificant on the map. But Pulau Dua, whose air is filled with the noise of countless birds' wings, plays a great part on the economic side of tropical nature.



CHAPTER II

A Harmless Hunter among Dangerous Beasts

The rhinoceros, like the elephant and the lion, has for a long time been the object of cruel and senseless persecution. The white man has shot the armoured pachyderm with explosive bullets. To demonstrate his superiority as the lord of nature, he has had himself photographed standing by or sitting on his quarry. He has set up his trophy, a rhinoceros head with one or two horns, at the entrance to his bungalow or his castle and thereby proclaimed his possession of the honourable title of big game hunter.

The yellow man has hunted the rhinoceros himself only in exceptional cases. He has inveigled brown man into doing the dirty and dangerous work: he has suborned others to kill animals without himself running the risk of being impaled on rhinoceros horns. The Chinese has never been interested in hunting, not even of a mountain of flesh weighing up to over four thousand pounds. He has only been after the horns and the blood, and he has not wanted these to brag about them, like the white man. He has ground the horn to a powder and mixed it with blood to

form a paste—and he has made a horrible amount of money out of this mixture. Many aphrodisiacs, means which are declared to enhance the male sexual urge, are sold in the Far East, but none of them have anything approaching the prestige of the rhinoceros preparation.

This persecution has gone to such lengths that the three Asiatic species of rhinoceros have been almost exterminated. Their protection has been urged, but such ordinances have compelled respect only from the trophy-hunters—stuffed heads of protected animals cannot be openly displayed and boasted of. As long as the demand for the wonder-working medicines continues to increase, so that the Chinese gain largely by supplying them, no such prohibition will be effective, especially as the native hunters hardly know what the word protection means.

The Indian rhinoceros, which has one horn, is the largest and heaviest of the Asiatic species. A very small protected stock remains in Assam and Nepal. The Sumatran rhinoceros has fared best despite its two desirable horns. On the mainland, the Malay peninsula, it is rare, but in the marshy regions of Sumatra and Borneo it is still considered fairly common. During the time which I spent in Indonesia the discovery of four rhinoceros carcases was reported from Sumatra. But how many slaughter-places may not have been cleansed of all smell by all the scavengers of the primitive forest!

The Javan rhinoceros is one-horned like its Indian relative. Its armour is divided into four sections which fit into one another over the animal's back. Only the male has a horn. The existence of the Javan rhinoceros is seriously threatened. Formerly it was spread over a wide area, to-day it is confined to the most westerly part of Java. The Indonesian protection authorities estimate that a swamp and jungle area of 90,000 acres contains about 45 rhinoceroses. This area is an uninhabited peninsula, most difficult of access, called Ujung-Kulon: it is moreover, cut off from the rest of Java by a narrow marshy isthmus which both men and animals find it hard to cross. Nature itself has made Ujung-Kulon a reserve for rhinoceros, tiger, leopard and many other animals. It would, therefore, be ideal ground for the animal photographer.

Volcano and Thunder Concert

By pure chance I was invited to take part in a ten days' fishing trip to one or two islands quite close to Ujung-Kulon. The party consisted of Dutchmen and was conducted by Dr and Mrs Kluyt, who also knew the country on the mainland. An encounter with the Javan rhinoceros was within the bounds of possibility, as the trip was made in the dry season,

when the rhinoceroses make their way to the clay-pits to sun themselves. The forest research institute at Bogor readily arranged for the necessary documents and permits, and the chief custodian of the museum, a Dane named Arne Stochholm-Dyhrberg, who had previously visited Ujung-Kulon, told us of his experiences and warned us against careless movements.

'Every step you take, mind that you've always got a tree close by! If the rhinoceros charges, it's too late to begin to think about finding a climbable tree. Good luck!'

We left the fishing harbour of Labuan in the Forestry Department's powerful motor-boat. And the ten of us on board, fishermen and crew, had not a dry rag on our bodies during the ten hours' journey, for the Java Sea was in a bad mood that day. A swarm of flying fish skimmed the wave-tops, a school of dolphins played about our bows, and flocks of terns were out fishing. And our fishermen had some luck too. They had thrown out in the boat's wake a large hook baited with a piece of meat. An unlucky twenty-five pound shark went for it, and was hauled on board amid loud cheers.

On the port side the sea was washing the mysterious shore of Ujung-Kulon. To starboard, out in the middle of the Sunda straits, brooded the still dreaded volcano Krakatoa. It is now called Anak Krakatau, Krakatoa's Child, for the original island was blown to pieces in 1883 in the most violent explosion the world has ever known. The tidal wave, a hundred feet high, went round the world several times and drowned nearly 40,000 people on neighbouring coasts.

At twilight we approached the little island of Peutjang, Gull Island, which was to be our headquarters. No one will camp on the mainland of Java: the risk of a rhinoceros or tiger looking in through the tent opening during the night is too great. (This has actually happened once or twice in the past few years, with most tragic consequences for the campers.) We had to share our living space on Peutjang with hundreds of thousands of flying foxes, which spend the day in the treetops. When we arrived they were just setting off for their nightly fruit-gathering. Some of them broke out of the cloud and glided down to the surface of the sea to cool themselves and quench their thirst. They put their heads under quickly and then sailed up again. While we were unloading, fireflies flew round us, glow-worms glimmered on the sandy shore, and the water round the boat was aglow with phosphorescent, green-glistening water insects. In other words, Peutjang received us fully illuminated.

On our very first night in the neighbourhood of Ujung-Kulon hell was let loose. Not only did the swarms of mosquitoes make sleep impossible

despite the nets over our camp beds. Anak Krakatau rumbled incessantly, as if a new eruption might take place at any moment. But the threatening noise of the volcano became a mere whisper when a tropical thunderstorm of the first magnitude broke. At four in the morning the flashes of lightning gave the light of a cloudless day. Then the rain came. The whole morning, the whole afternoon, the whole evening the water streamed down. I had come to Ujung-Kulon to experience the dry season there....

For days and nights on end it poured with rain. The water rose from the soaked ground till the mist stood thick: life became miserably sour and unpleasant and tedious. The fishermen sometimes defied the rain, went out fishing naked and supplied us with fresh fish.

As soon as a rift in the rain-clouds appeared I went over to the mainland for a first reconnaissance with an old Javanese called Saka, formerly a poacher but now ranger in Ujung-Kulon.

A Hot Wait in the Trees

The tidal wave which sprang up after the Krakatoa explosion had washed in over the vegetation of Ujung-Kulon with devastating effect. Here and there open meadows were formed which the jungle has not yet been able to reconquer, and the Indonesian protection service is trying to keep these meadows open for the benefit of the animals. They also afford excellent observation posts for those interested in wild life.

One of these broad meadows, with isolated shady trees, lies opposite Peutjang. The ranger has erected a tower on a level with the tree-tops just inside the forest. It was from this elevated point that I first made the acquaintance of the rich wild life of Ujung-Kulon.

Flocks of peacocks were pecking in the grass, the cock birds displaying all their splendour. Their shrill cries made a herd of sambur deer stand and listen, as if they had been a warning of the presence of tiger. The loud beat of the hornbill's wings continually cleft the air. Six wild pigs were rooting up the earth till it looked like a potato field. An eagle stooped and dug its claws into a large black vole, ate it up at once and then stalked airily about in the grass. When I examined the ground through my glasses I saw everywhere large heaps of the dung of the wild ox, the *banteng*, but the animal itself did not appear during the hours I sat up in the tower.

As Saka and I were making our way back to the shore through the undergrowth of nipa palms, we almost scared a varan to death. The rain had begun to patter on our oilskins, but I no longer worried about that. Never before had I seen so much wild life in such a short time. Before me, ninety yards away according to the distance gauge on my camera, a

well-trodden big-game track emerged from the black wall of jungle and led through waving *alang-alang* grass three feet high. In a tree-top I could fix up reliable camouflage, and the fork of two branches in which I sat was a good support for the stand as well. I had a 50 cm. telephoto lens directed at the hole in the jungle wall, and Saka declared that I could count on both *banteng* and *badak*, rhinoceros, appearing there.

No one could have seen me climb up, as it was now quite dark. No one could have heard me or scented me. The wind carried to me delicious scents from the forest ahead. I had intended to sit there and keep my eyes open till something happened, something that was worth photographing. On such occasions one waits for miracles—and perhaps it is just that which makes hunting with a camera so exciting. One never knows beforehand what may happen in the next fraction of a second. One only knows that one must not make a single careless movement, that one must not lose contact with the camera's finder, that one must always have one's ears open for the slightest sound. It is hunting, with all its nervous tension—but hunting which never harms a living creature.

When I was obliged to rest my bloodshot eyes for a moment, they wandered at once over the camera settings. Was the lid of the cassette fitted properly, the film threaded, the shutter wound up? Was the camera focussed as it should be, on a point a few yards in front of the black hole? Fancy if a herd of wild oxen came snorting through, or a clayey, armour-clad *badak*! They would not know that I am waiting for them. Or could they have guessed it? There was really no certainty whatever that they would tread this path just that morning. And suppose they came another way? Then I should be sitting there helpless: then they would discover me, hear the rattling when I fiddled with the camera, or else would scent the detested human creature.

It was quieter in the forest than I had expected. Certainly a vankiva cock croaked in the bush, and a pair of hornbills swished over my tree, but the homeward bound flying foxes hovered over, noiseless ghosts above the roof of the jungle, and the cicadas fell silent when the sun came up. The damp rose like steam out of the wet *alang-alang* grass. The midday sun, burning hot, repaired what it had lost during the continuous rain of the past few days. The ground shimmered with hot vapours, the sweat ran in swift streams over my body. Every little wrinkle in my skin became a channel for salt moisture. The longing for water gradually became irresistible and compelled me to move: the lukewarm tea in my bottle gave some relief, and I consoled myself with the thought that during the hottest hours of the day all the animals were lying still and panting in the deepest

shade they could find. The *badak* had gone down into one of the rain-filled water-holes, and was lying there cooling himself with only his nose above the surface of the water. The jungle has its siesta too.

After 4 p.m. it livens up again, but by that time I was so exhausted by the loss of moisture that time after time my head fell down towards the camera. I felt that complete unconsciousness was lying in wait for me.

I was suddenly awakened by a sound. Was there not a rustling somewhere? My eyes ran cautiously over the grass in front of me. It might have been a python striking at a rat: if so, I could not possibly detect it. All was quiet again, but my senses were fully alert. Yes, something was happening. The rustling began again, and at the same moment I caught sight of the animal. It was a long-armed grey gibbon making for my tree. It came bounding over the grass, in long leaps. I sat motionless, and there was no hesitation in the monkey's movements. It came to the trunk, embraced it and climbed up with agility. But a few feet below me it stopped short. It had got wind of a smell most exotic in those regions—for sweaty Swedish feet are extremely rare in Ujung-Kulon. Its comment on the phenomenon followed immediately:

'Ho, hoohoo, hoohoho-o-o!'

And then the creature lost control over its limbs. It lost its grip of the trunk as though paralysed and fell to the ground with a thud. But it had not lost consciousness altogether. It stared up at me as if wanting to make certain what kind of a monster was sitting up there.

Then it rushed for the nearest cover in wild flight. The peacock shrieked, laughing at the monkey's cowardice. I myself laughed and swore alternately. Why in heaven's name should I have had the telephoto lens on the camera just then?

Seven Black Bulls in a Ring

The rhinoceros tracks on the sandy beach at Njiur could not be more than an hour old; the crabs had not yet crossed the big holes. The hoofmarks with the three toes lay before us like a plaster cast. Saka was sure that the animal had been making for the mud-hole, where he had observed the rhinoceros so often before. The tracks turned in among a confused mass of nipa palms, the leaves of which hung down close over the waist-deep mud: there were no trees which could be climbed quickly.

But Saka's presence inspired me with such confidence that I did not properly realise the danger. He stole along as softly as a panther, peering and listening, with his rifle ready. I held the camera over my head as I went along the dirty grey ditch in which the great beast had gone before

me. But he had gone into the bush again: the thorns of the rattan palm had not hindered him, nor the lianas' plait-work. Saka hauled himself up into a liana now and again to take a look and find a decent route for us. But the ground was flooded everywhere, and it was hopeless to try to get forward without making a noise. If the rhinoceros heard or got wind of us in there, he certainly had an advantage over us. The little pig's eyes do not see much, but he attacks blind. Saka had sat in a tree for many long hours with an angry rhinoceros snorting under the soles of his feet. On one occasion the beast had driven its horn into a tree and cracked the trunk.

Saka had heard something suspicious. Not a quiver was to be seen in the wiry old body. I, a yard or two behind him, stretched out my neck and listened, so intently that I could hear my pulse beating. A faint grunt and a crashing noise were all I could remember. How I got up the tree I do not know, but I was some twelve feet above the ground. I hauled up the camera by the cord which I had slung over my shoulders before leaving the camp.

No *badak* was to be seen below. Saka stood grinning where I had left him. The only thing *he* had seen was that I could clearly get a move on if necessary. The palms of my hands and my legs were red-hot when I stood by his side again, rather ashamed of myself.

'*Babi, babi, tuan*' (Pig, sir!) he whispered in my ear.

We waded forward through reed-bordered swamps where varans twisted themselves out of our way among thick carpets of water-lilies. Herons were fishing with great flat leeches swimming between their legs. Wild duck flew up in hundreds. At the rhinoceros' mud-hole, where as a rule the clay was scarcely wet, there were now three feet of water, brown clear water which the rhinoceros did not like. But we found the fresh footprints again not far from his bathing place, and Saka read from them that he could not be very far away. The leaves he had torn down from the trees had not yet withered.

Saka used his jungle knife without making a sound, cutting away trails of rattan and lianas without the party of macaques over our heads noticing that anything was afoot. I was on the point of rushing up a tree again when Saka stopped suddenly and made a backward gesture with one hand. This was the signal to get up a tree, but I checked myself at the last moment. I had caught sight of a most peculiar animal which was creeping slowly over the undulating ground and had not yet detected us.

'*Tuan, peusing ada* (it's an ant-eater). Shall we catch it?'

Just then the grey animal got wind of us and made off. Saka had dashed

after it before I could reply and caught hold of the long tail at the last second as the animal was escaping up a tree. The sharp digging claws were tearing the bark off in flakes, but Saka let the ant-eater go before he got his fingers caught. The creature rolled itself in a ball, with the long narrow head inside and the tail wound round the body. The whole body was covered with a hard shell arranged in layers like the scales on a fir-cone. It was rolled up so tight that I had difficulty in getting my fingers in between the tip of the tail and the body, but at the same time I could lift it and carry it like a bag. I judged its weight to be about 18 lb.

The pangolin (the Javanese ant-eater) is a nocturnal animal which sees badly but has well-developed hearing and nose. It digs its way into termite heaps, both on the ground and up in the trees, with its long claws and licks up the ants with its long, flat, sticky tongue. It has no teeth, but instead its digestive apparatus is equipped with thousands of miniature teeth which chew up its food. The natives believe that the ant-eater, at a termite heap, behaves as if it was dead. Its tongue hangs out of its mouth, and the ants gradually begin to walk over it: so the ant-eater needs only to draw its tongue in quickly and swallow its prey. It also makes its scales open so that the termites can creep in between them. When the itching becomes too unpleasant, the ant-eater closes the chinks in its armour, and goes off to a river. While it is bathing the ants are drowned and float up to the surface, where the ant-eater can consume the delicacy at its leisure.

The ant-eater was the end of our exercises for that day. Neither Saka nor I cared to continue our apparently fruitless tracking of the rhinoceros. But we did not altogether give up hope of seeing a *badak*.

We had been working our way forward along a clayey river for almost a whole day, slowly and carefully so that the water should not splash too violently about our ankles and make a disturbing noise. Not a single trace in the soft clay on the shore betrayed the presence of a rhinoceros. On the other hand, at a bend of the river we had surprised an otter family of five, fishing and playing as peacefully as possible until they caught sight of us. Then the whole party shot under the dense vegetation, but were soon peeping out inquisitively and commenting on our presence with funny little squeaks. Twice we heard miniature deer, muntchaks, bark and spring up. They are only about eighteen inches high, and are very shy and extremely difficult to get a sight of.

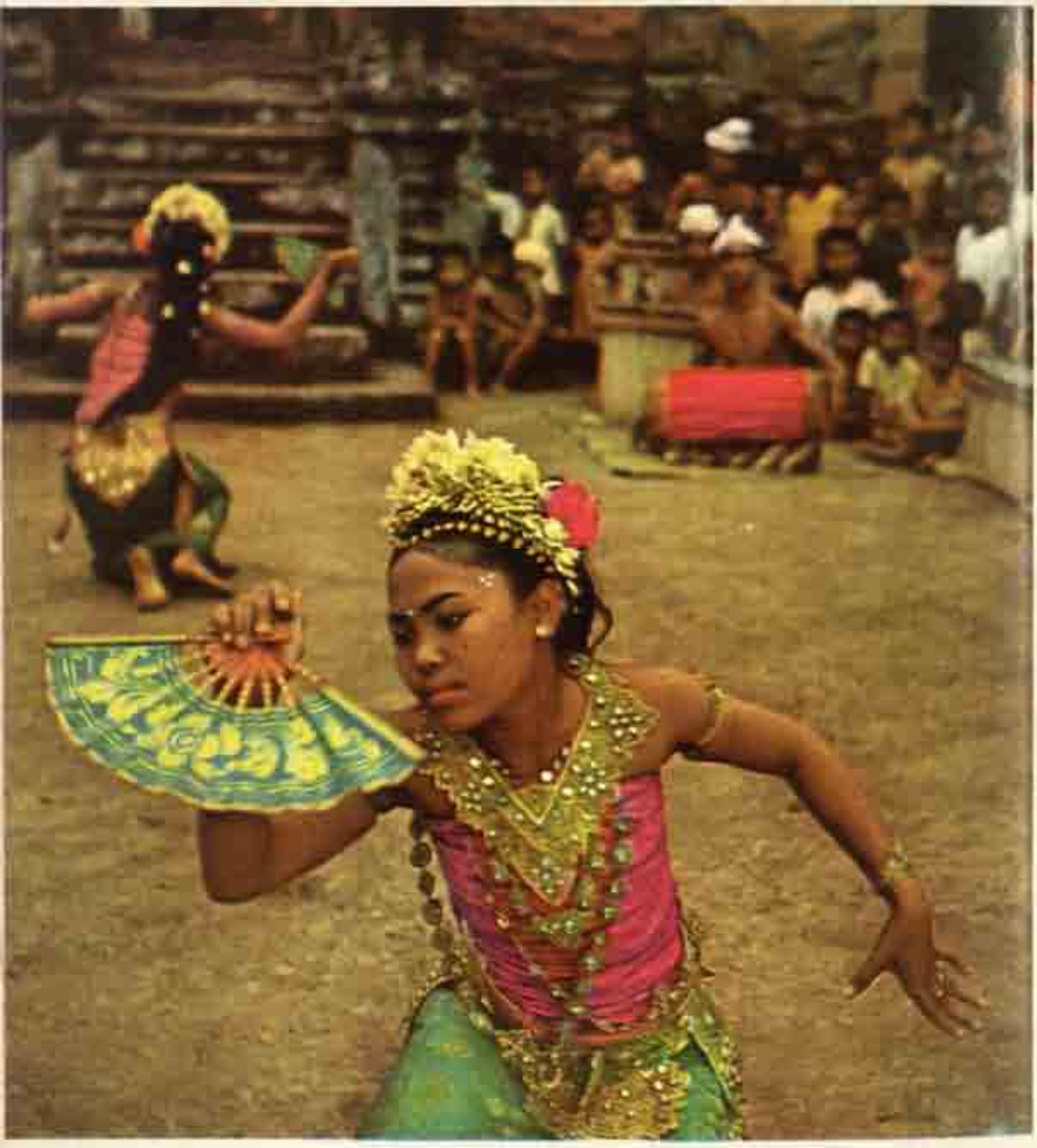
Suddenly the jungle opened. I lay down and swept the low ground and its scattered trees with my glasses, and stopped short when I saw a pair of antlers about 150 yards away. Saka was ordered to wait. I wormed my

The water-logged rice terraces spread like a map, with the little green triangle of mother plants in the middle and the rice goddess's simple temple in the background.

ABOVE, RIGHT: Sickle in one hand, basket in the other, a twelve-year-old poses proudly on his way to get food for the house animals.

ABOVE, LEFT: The boy's little sister weaves pretty cloths and ribbons on a simple loom.

Not people, but gods, are in the chairs, protected by parasols against rain, sun and the eyes of over-bold photographers.



Ni Galungan became my favourite among the hundreds of Bali girls from eight to twelve years old who are trained in the ancient dances of the country.

way into the protecting grass with the clumsy camera equipment, to get to the right range for the telephoto lens. I may just have thought of the risk of meeting and scaring a cobra whilst moving along, but the stately sambur stags were within range, and the fear of snakes had to come second.

The tree-trunk I arrived at was large enough to hide me and give shade, but too thick to climb. Two sambur stags and a hind were grazing at their ease 100 yards away from me, all three moving slowly towards my tree. I arranged myself in a sitting posture and looked down into the finder, where I could observe every movement of the party of deer, which was soon increased by the arrival of a playful younger one. The field became narrower and narrower the nearer the animals came. After an hour my eyes began to water and I had to rest them. When I tried to rise behind the tree-trunk, I saw a black shadow to my right.

It was a shadow that moved, that grew and took the shape of a large wild ox. It was a trifle too close for the surprise to be altogether agreeable. I found that it was not alone. There were shadows everywhere. I was surrounded by a whole herd of *banteng*, whose presence I had not perceived while I was concentrating my attention on the stags.

When the first shock of alarm had subsided, I was able to count seven great black bulls and fifteen brown cows and calves. Most of them were less than 30 yards away. I sank down into the grass and wondered how they might be expected to behave if they detected me. The brown cows with oval white patches on their buttocks certainly looked good-natured, like our tame cows, but the black bulls inspired respect with strips of bark hanging from the tips of their powerful horns. They looked sinister, and if they turned nasty when they heard me or caught sight of me, my position was rather exposed. There were no climbable trees nearby, and a wriggling retreat along the ground might perhaps annoy the herd.

For the first few minutes I did not dare to think of using the camera: the noise of the shutter would reveal my presence at once. But I could not resist the longing to take at least one picture, and this I did by keeping my finger on the release till there was some natural sound to drown the click of the shutter. A peacock shrieked. An outburst of monkeys' chatter, which attracted the attention of the herd, was enough to enable me to take a whole series of pictures.

But at last I was detected. A cow with a calf stood staring at me, but, as I lay as still as death and she did not get wind of me, her suspicion disappeared and she began to graze again. Not even the stags, which were now less than a stone's throw away, had noticed me. Had Saka taken a

look over the ground? Had he not wondered where I had gone? Had he thought of any way of helping me in case of necessity?

At last the whole herd had seen me, but none of the animals seemed to be thinking of flight. The bulls regrouped themselves in a rather unpleasant manner. They did not form a ring with horns outwards, as musk oxen do, but all turned towards me threateningly, with lowered horns. But nothing happened: they seemed so confident of having me in a trap that they had no need to attack me.

Strings of bark hung from the great horns of the leading bull. There were many wrinkles of fat under his chin: there was a crowd of ticks upon the thick shining black hide. His legs had white socks. I thought I could see security and self-confidence in his great eyes—in fact he looked quite friendly. Perhaps he had no hostile intentions towards me: I must naturally seem to him pitiably small and insignificant.

It may have been the roar of a tiger, a hornbill's shriek or only a displaying peacock that gave the danger signal to the herd of wild oxen. The sound from the forest made them forget the small creature behind the tree-trunk. They pricked their ears and all showed signs of uneasiness. Then they collected and moved off towards the protection of the jungle, all turning their white oval marks towards me. Bulls marched at the head and in the rear, and now and then one of the last in the line turned and looked in my direction. A quarter of an hour later I could get up—or rather, I could try to raise my cramped body.

Saka was not where I had left him a few hours before. It took me a good two hours to wade, now in the dusk, down the narrow river and reach the sea-shore, two unpleasant hours amid crowds of bloodthirsty mosquitoes. The glow of Saka's cigarette revealed his whereabouts. He was sitting in quiet meditation with his back against a palm trunk. He looked most astonished when I came up out of the river. Was it my spirit that had survived me? He had made sure that the white man had been impaled on on the horns of a *banteng*.

Prowling Tiger

The wind had freshened, and there were white horses on the waves between Ujung-Kulon and Peutjang. Saka made a fire signal over to the island and the motor-boat came to fetch us. I was first ashore and was hurrying up towards our quarters, when someone ahead of me gave a cry of horror. In the gaslight from the house I saw a woman's form on the path in front of me. It was Mrs Kluyt. I rushed forward as fast as my feet would carry me through the loose sand. Mrs Kluyt could not move. In

the middle of the path before her was curled a snake nearly five feet long. It moved off quickly when I turned my electric torch upon it, but I got hold of a slat and managed to pin it firmly to the ground. It twisted and struck at the stick, but could not get away.

It was a banded krait. Mrs Kluyt had been on her way up from bathing and was walking bare-footed. She saw the snake lying on the path, but thought at first that it was the tortoiseshell cat and meant to shoo it away. At the last moment she saw a sinuous movement and checked herself. She was paralysed with terror, and the shock continued all night, in spite of the tranquillizing injection her doctor husband gave her.

I got a notched stick round the head of the snake, which was beautifully striped in yellow and black, and succeeded in thrusting it into a jar of spirits to be conveyed to the museum at Bogor. The bite of a banded krait is certain death.

The weather was wretched during the whole of our stay at Ujung-Kulon. The rain was the Javanese rhinoceros' best ally. But Saka fought loyally at my side: nothing seemed to trouble him. He continually had new ideas, new dodges which he wanted to teach me.

We were punting up a little overgrown river, the Tjigenter, which was usually dry at that time of the year. We glided through thick bamboos, where a *badak* had broken down a clump and eaten the terminal shoots. My heart beat more and more violently: I was sure that the rhinoceros was quite close. I gave a start when a few cackling pheasants flew up. But a fleeing party of monkeys warned the *badak* of our presence, so there was nothing doing for the next few hours, and we might as well take a rest and drink tea on the river bank.

During our rests, when as a rule we sat in silence, listening, there was always something rustling in the bush, and tense minutes passed before we were able to guess what it might be. On one occasion I saw at once in Saka's eyes that it was nothing unpleasant. The biggest wild boar I ever saw advanced to the river bank. He walked straight into the narrow field of the telephoto lens at a distance of eight yards. He rooted up a few beetles from under a rotten stump on the bark, and he was rather astonished when the sound of the shutter betrayed us. He looked furious, and the hair rose on his neck like a crest, but then he swung round, throwing up a shower of wet clay, and his flight through the bushes was so noisy that the whole forest seemed to be crashing down.

At last the river became so shallow that we could punt no father. Saka waded a little way, while I cooled both my own body and the hot camera. I was afraid of the film in it melting. In half an hour Saka came back,

gesticulating with delight. His slim figure tripped forward among the stones in the water with the ease of a ballet dancer: and I could see when he was still far off that he had a surprise for me.

'*Tuan*, there are many tiger and *badak* tracks up there. The tiger is sure to come back. The tiger always goes the same way. *Tuan* must see a tiger!'

The tiger's trail went like a path down one bank of the stream and up the other: evidently its hunting beat ran across the stream. Great holes in the clay and deep footprints in the sand showed that a rhinoceros also had been about. But the tracks were not quite fresh.

Quickly and silently Saka helped me up into a convenient tree in which I could make myself comfortable. The boughs formed a platform and the light was excellent for photography. Saka was to paddle downstream, sit in a tree and wait till I shouted in the course of the evening. He promised not to go off to the mouth of the stream, even if it was a long time before I called him.

Two little glistening blue kingfishers kept me company during the next few hours. They flew as swift as the wind up and down the section of the brook which I could see from my tree, now and then perching on a bamboo twig and peering down at the water. They never detected my hiding-place. They were astonishingly like our Swedish kingfishers, except that the bill was thicker and rather longer.

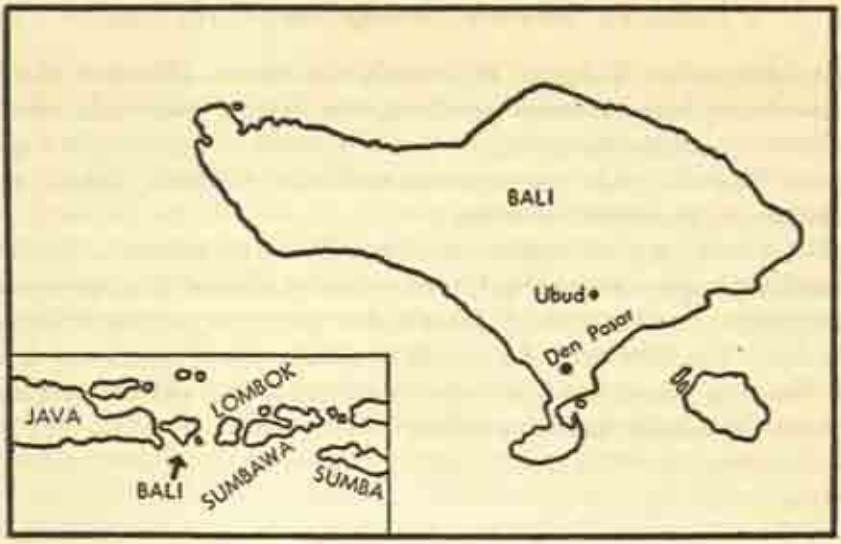
At about 5 p.m. it was as if an invisible hand had switched off the light, and at the same time an owl hooted quite close. An answer from another owl came from the hill above. The sky clouded over, and after another hour the rain came, lashing me and my camera. Oh, that devilish rain! But it can stop as quickly as it begins, and so I stayed where I was. Every sound in the jungle had ceased except the plashing of the rain. It was nearly dark, and my eyes ached with the strain of watching.

Then he was standing there, suddenly, like a vision. At first I could see only the fore-part of his body, swaying to and fro. The striped cat padded forward to the water, stood for a little while as though meditating, and then walked out into the stream. At every step the tiger shook out its paw and sent a shower of water flying. I had difficulty in making it out in the dark, but I could see it stop in the middle of the stream and look round. Its tail went up in the air when it gazed downstream, as if it had guessed that Saka was sitting a few hundred yards farther down.

Neither sound nor scent could descend from my place, 40 feet above the tiger. It turned sharp round with a splash and came back towards the tree. Had it forgotten something? Then it turned again and went straight across the stream, stopped on the other bank and shook itself till the drops of

water pattered on the leaves. The rain did not seem to affect it at all, nor was it in any hurry. It stood for a long time looking backwards over its shoulder. Certainly the second hand of my watch had gone right round two or three times when the tiger was swallowed up by the darkness and continued its nocturnal wandering.

No, I could not photograph the tiger. Not with a camera. But the magnificent sight was impressed on my mind for all time. At that moment I forgave the weather-gods of Ujung-Kulon their capriciousness. I forgave the *badak*, the rhinoceros, for having failed me. Saka had guessed from my shouting what I had seen. When we met his kind old face was illuminated by a smile that was a reflection of my own.



CHAPTER 12

Beauty and Death

Many shelves of books, in all the languages of the world, have been written about Bali. Scientific treatises on Balinese art and Balinese dancing have been published, and superficial luxury-cruise articles have been written about the beautiful women with bare breasts on the paradisal island. The newly awakened national pride of Indonesia required that the female breast should be covered now that she had become a free republic —and that pigs should not be allowed to run about loose. With the first object in view the Government distributed cloth to the women of Bali. But in the remoter villages the female breast is still as uninhibited as the pigs.

Bali has also been photographed more enthusiastically than all the other Indonesian islands put together. A swift-flowing stream of films and illustrated books has placed on record the island's overwhelming natural beauty and rich colouring. Painters and sculptors have made pilgrimages to Bali, and some of them have stayed there for the rest of their lives. I looked in vain for the grave of my countryman, John Sten.

Bali is to-day, it cannot be denied, a recognised tourist attraction of the

same kind as Hawaii and other South Sea paradises. An island with a specialized culture easily gets a label attached to it, and Bali's label is marked 'the last paradise'.

I had been effectively warned before coming to Bali, both by my own suspicion of the chorus of praise and by the one among my personal acquaintances who knows Bali best: Eric Lundqvist. He has more than twenty years' experience of Indonesia, and visited Bali before the second world war. He advised me to be sceptical, not to pitch my expectations too high, to mistrust all art which was offered for sale, and to remember that time did not stand still in Bali any more than elsewhere. There had been many changes, he said, and changes in the old cultural centres which have become popular tourist resorts are most often for the worse.

Thus I came to Bali full of prejudices. I would not let myself be taken by storm, I would not let the fresh impressions of nature and people I had obtained on the other Indonesian islands be washed away by a stream of tourist-resort artificiality.

Dance Who Dares!

I was the guest of an agreeable prince, Tjokorda Gedeh Agung Sukawati, in the village of Ubud in the middle of Bali. His *puri*, or palace, consisted of several small buildings inside a wall, which had an imposing red brick gateway with decorative sculptures in sandstone. Out in the garden were many old isolated sculptures. The walls of the verandah were ornamented with reliefs depicting dancing and sacrificial scenes. One evening we were sitting over a cup of tea. The evening breeze carried to us a sweet scent of jasmine. A stone god in the garden had received a gift in the shape of a newly blown, fiery red hibiscus flower behind one ear. A native band was rehearsing on the other side of the wall: the muffled sound of metallophones, xylophons, gongs and drums reached our ears.

The prince told me that a *joged bungbung* would be danced that very evening on the outskirts of Ubud. This was a pretty and amusing dance, but one not very often seen in that part of the country. He advised me to put on Balinese clothes. If I did, I should be able to take photographs more freely and I should harmonise better with the milieu. He himself helped me to drape the twenty feet of cloths round my chest and pull them tight.

The preparations were far from complete when I arrived at the scene of the festivity with a torch in my hand. Some boys were putting up a gaily-coloured tabik curtain at one end of the rectangular dancing floor,

which had been marked off with garlands of palm leaves and oil lamps. The public were streaming in. They killed the time of waiting with dicing and card games, or bought and ate *saté*, grilled pieces of meat spiked on bamboo skewers and prepared with strong, burning hot spices. The band for this dance was reduced in numbers, and consisted mainly of bamboo sticks and xylophons.

I turned up my sarong over my knees and placed myself beside the small boys who were sitting along the sides of the dancing floor with crossed legs, like the musicians, and beat time with bamboo sticks.

Suddenly a young girl stood in front of the curtain, with quivering fans in her hands. Her head was gently bowed, and there was a roguish gleam in her brown eyes. She glided softly along one side of the floor, as if looking for someone. She disappeared among the spectators, and a fan pointed challengingly at an intended partner. But he squatted down at once or ran away, and everyone tittered and smiled. A *joged bungbung* is a dance with an erotic significance. It might be called a flirting dance, with due reservation as regards the superficiality of the term.

Man after man drew back when the fan pointed at him, challenging him. Would the dance end without the pretty girl getting a partner? I, sitting and fiddling with my camera, began to be a little offended on her account. I saw the dance through Western eyes and understood nothing. . . .

Now the fan was pointing at me! This was what they had all been waiting for: smiles gave place to laughter and cheers. But there was friendliness towards a foreigner in the laughter, and the fan drew me like a magnet up from my place, out on to the dancing floor. I took off my camera, kicked off my sandals, and danced.

The girl's eyes met mine, grave but smiling. She was bewitchingly pretty. A hibiscus was stuck in her blue-black hair. I felt the light draught from her movements, the honey-sweet scent of the cream-coloured magnolias in her fillet. This light contact, without the dancers' bodies touching, corresponds in Balinese dancing to Swedish kisses. The bamboo sticks and xylophons were heard now as a descant above the cheering of the spectators, who were now the main orchestra. My embarrassment disappeared: I imitated her movements as well as I could, letting myself be carried away by the colour and rhythm and scent that were part of them.

After half an hour the little dancer took me back to my place. I had not made a fool of myself. I had joined in, I had played, and so was accepted. For the rest of my stay at Ubud I was called *tuan ibing*, Mr Beginner. I regarded it as a title of honour.

STAKE WHO DARES!

The priests scatter holy water over the area. In one corner they sacrifice to the gods and so they decorate the place, close to the temple wall. Cock-fighting is a religious ceremony in Bali, or at any rate was one originally. It is naïve, therefore, to regard it—as I once did in my ignorance—from the standpoint of cruelty to animals. A native of Bali answered me:

'Is it less cruel to cut off a hen's head and serve her up on the dinner-table than to let two cocks decide in honourable combat which of them is the stronger? Moreover, when the evil spirits receive an offering which satisfies them, and we thus assure ourselves of good harvests in our rice-fields, is there anything wrong in blessing cock-fighting?'

But while dancing, on the whole, has preserved its religious character, it is clear that many people have forgotten the connection between ritual sacrifice and cock-fighting. It has become a commercialized public entertainment, and the scene reminds one somewhat of a Sunday football match in Sweden. There is keen betting: betel-chewing and arrack-drinking men stake large sums. While I was exposing three rolls of film, the man who had driven me to the cock-fighting arena was winning a sum corresponding to £35, a dizzy sum for a man in his position. But next day he lost a good deal more.

The cock-owners discuss the sport as they weigh their cocks, which have been brought to the arena in prettily plated baskets. A pair which seem to have even chances are set to fight as a test—without the lethal steel spur which is fastened to the left foot. It is still a game. It is, to use athletic terms, a warming up of the valuable birds before the decisive contest. A good fighting cock is exercised daily, has a special diet, is cared for like a racehorse. But then it can, on account of the betting, be extremely valuable to its owner.

The three judges—grave, elderly men, but as interested in the competition as the more youthful spectators—take their places. They have before them an abacus and a large bowl of water. All the others now withdraw, and all eyes are turned to the two men and their two fighting cocks, which are held at a distance of two beaks' lengths from one another. One cock is red, the other white. The cocks are bounced on the ground once or twice, their tail-feathers are ruffled up, their beaks are stroked. When the neck-feathers are raised in anger the last rupees are staked. All are waiting for the judges' gong.

Now—the combatants stand beak to beak, fixing one another, dancing round like a couple of boxers. Their necks bend in snake-like movements; keen blood-red eyes seek for an opening. Then one of them flies up, and

all becomes a chaos of feathers, spurs, claws. All the details become quite invisible to the uninitiated, while the experts comment eagerly and judicially on the course of the fight.

The white cock tumbles to the ground like a stone, and lies motionless. A coconut shell with a hole bored in it is laid in the bowl of water before the judges. The insensible cock must be on his legs again before the nutshell has sunk to the bottom.

Breathless silence, anxious waiting for those who have staked their money. Then the white cock is on the red one like a whirlwind. A lightning blow, and the spur, four inches long, has pierced the enemy's heart. The victor is placed in his basket amid loud cheers. The dead cock is laid down beside him. But he and his blood are no longer sacrificed to the gods, as before; they go into the owner's cooking pot at home. But the steel spur has been removed from the victim of the evil spirits, the victim of the gambling craze in Bali.

Beauty and Life

I walked home in the twilight. The rice terraces on the slope are perfect works of art, the result of centuries of toil. In these rice terraces ordinary cultivation has blossomed into a wonderful beauty, crowned by the little temple of the rice goddess which I could then only faintly see below in silhouette. My senses were still disturbed by the dancing and cock-fighting, and I went down among the rice-fields to find peace and quiet.

Dancing and cock-fighting. In the traditional dance I was the butt, the appointed laughing-stock. I was *tuan kodak*, the white photographer, who, with all the technique I represented as a westerner, cut a poor figure. But the fan pointed at me and chose me to participate, to be accepted into a community. When I had danced I was no longer a tourist and foreigner, but a guest and friend.

And so it had begun during the whole of my long journey round the equator. Not till I had admitted and accepted my own helplessness in the jungle, in the river, in the hut, was I received as a member of the circle of those who were masters of their own milieu. Then and not till then was I admitted to share all the beauty which fear, ignorance and contempt too often hide from us white people in the tropics.

The dance was beautiful, although I was taking part in it. It was well-intentioned: its object was pleasure, not pleasure tinged with malice. The cock-fighting was an offering to powers of evil. The smell of blood stung my nostrils as a warning of the death that lies in ambush in the realms of beauty.

But I was not thinking of the poisoned arrows in the blowpipes, nor of the tiger stealing through the woods after its quarry. It was death from poverty and hunger. Death from ignorance and superstition, death from sicknesses caused by privation. The valuable great trees in Borneo, which are condemned to rot and die because no one can transport them from their lovely prison in the jungle. The great numbers of children who never reach maturity because their undernourished bodies have no power of resistance when epidemics break out. The deaths of the superfluous in a world born to starve.

Dancing and cock-fighting in Bali, beauty and death in the tropics. The last rays of the sun had flashed and disappeared behind the chain of hills, the light in the water-mirrors of the rice-fields had faded out. In the darkness round me, round the little bamboo temple of the goddess, plants were growing which would soon glimmer silvery green in the moonlight, which would be harvested by singing people in festal garb, which would feed mouths. Beauty and life.

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