The

GEOGRAPHICAL JOURNAL

Vol CXIV Nos 4---6

October—December 1949

EXPLORATIONS IN CENTRAL BORNEO

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THE FAR INTERIOR of Central Borneo, third largest island in the world, was not penetrated by any white man until the present century, though Spenser St. John, starting from Brunei in 1858, made a remarkable 55-day expedition along the Limbang river to the edges of the upland country. Much later this route from the middle Limbang up its Adang tributary to the Trusan was developed as an occasional government patrol line and used several times in the 'thirties. But during the Japanese occupation the long depopulation of the upper Limbang was completed, and the Adang emptied; this effectively seals off the whole headwaters for normal travel, and involved me (during 1946) in a fortnight's extra walk through those now uninhabited areas.

Farther south, the celebrated Charles Hose 2 was first Resident on the Baram. He heard of the Kelabit plateau in the headwaters of that mighty river and in 1898 was responsible for sending a native expedition up-river and eastward across the central range to punish hill peoples raiding over into the Baram. Their country (now Dutch territory) was first visited by Mr. D. A. Owen in 1912, four years after Douglas 3 had visited the upper Baram, but to this day the source of the Baram has not been exactly located, although I was within a few miles of it when climbing Apad Runan (7300 feet), perhaps the third highest mountain in Sarawak.

Visits from whites have remained few and erratic. Generally once in two or three years an administrative officer patrols through part of the Uplands along one of the better defined tracks. No one resided there until 1945. The upland boundaries separating Sarawak and Dutch Borneo have not been accurately surveyed, and overlap by as much as 20 miles on different maps: the northern Dutch border abutting on British North Borneo was cursorily defined before the war. During wartime parachute operations we were often uncertain which country we were in. When we built an upland airfield, on some maps it was in Sarawak, on others in Dutch Borneo. Much confusion resulted and some of it reached the highest political level, for the Dutch at one stage misunderstood the intention of British activities inland.

¹ Spenser St. John, 'Life in the forests of the Far East,' vol. 2. London, 1863.

² Charles Hose, 'Natural man: a record from Borneo,' London, 1926.

³R. S. Douglas, Sarawak Museum J. 1 (1912) 17; and manuscript notes, courtesy, D. A. Owen.

In 1945, several Service bodies compiled special and "up-to-date" Borneo maps, first for American bombing operations, then for Australian landings at Tarakan, Brunei, and Labuan. The R.A.A.F. 1/1,250,000 map (1945), though more accurate than the U.S. Army Air Corps 1/1,000,000 (1944), makes the whole Trusan flow in a sea-level valley; it elevates Mt. Kinabalu in British North Borneo to 10,000 feet in response to the pilots' belief that this peak was Himalayan, although it has been climbed and fixed at 13,455 feet. No wonder planes often dropped our supplies in the wrong places, or got lost. The Australian Army's 1/250,000 version (1945) shows the Trusan as an almost straight river, running up into country correctly marked "unsurveyed." When pilots found their own maps useless over the interior they tried this Army map and went as badly astray, since the Trusan has in fact a particularly complicated and erratic course. The earlier Army map (1944) was at least less misleading, in that it left out the mighty Trusan altogether! The combined Dutch-U.S.A. map, "Oost Borneo" (1/1,000,000) is a fine work of imagination. It shows, for instance, the landmark Gunong Murud (Malay name) twice, once as Moeroed Piek (Dutch for the same) 20 miles away from Gunong Murud and 1000 feet higher; while the U.S. Army 1/1,000,000 (1944) puts it miles off as Moeloek. The R.A.A.F. 1/1,000,000 (1944) omits Murud completely. None of the main maps in use showed Batu Lawi, although its twin white pinnacles proved far the most distinctive landmark in the interior (see below) and key to all upland flying and dropping operations. These errors t were partly due to faulty coordination of the limited existing information, partly to the large areas blank on the map which challenged the tidy minds of armchair strategists in Washington and Melbourne. In consequence, scores of downed airmen, and not a few ground troops, lost their lives unnecessarily.

The Dutch, though they started last, have been the most energetic both in survey and in parallel interior administration. Their forestry survey, for instance, was ahead of any British. Inland they maintained an educated Malay with the rank of District Officer to each district of over six thousand people, acting under a Dutch Controller at Malinau near the east coast. At Long Nawang, a large village in the upper Kayan river (the middle stretches of which were approached by Hose in 1898), they established a pre-war head-quarters, with white personnel and native troops. The object of this has never been quite clear. Long Nawang is an awkward place to reach by river transport owing to a break of about 20 miles where the Kayan enters the spectacular Brem Brem gorge, necessitating a difficult porterage; on average, the journey takes one month. Nor does this give effective control of the interior, since the Kayan is cut off from the Upland country to the north by a series of east-and-west mountain chains. It does however give best access to the head-waters of the Rajang river in Sarawak.

From the Dutch side, the effective literature on the Borneo interior is even less than from the British. Elmshout's study of the Long Nawang Kenyahs is an authoritative work; there is nothing worth while on the Dutch hill tribes. Long Nawang, because of its relative accessibility and militarized "security," has attracted a trickle of travellers, mostly American. The latest, Charles

¹ I hasten to add that the appended sketch-map may correct a few errors in broad outline and is bound to perpetuate others.

Miller, in 'Black Borneo' meets orang-outangs, one of which kills his cameraman with a single blow—an appreciable extension of this ape's known strength and a striking extension of its known distribution. Not content with finding the Kenyahs still active headhunters ("the village was blood-parched and now the end of the drought was in sight") he also discovers cannibals and sadists. Here is his report on one river lady:

"When the butchery of her sweetheart did take place, she had with her own little hands cut off the fingers of the slain youth and used them for decorations on a new hat. Women, she assured me gravely, knew lots of tricks like that, and when it came to carving up a human body for a cannibalistic feast, only women knew how to select the choicest morsels."

I feel that if Mr. Miller had ventured into the more difficult hill country he would have made the present paper appear poor and insignificant indeed.

The recent awakening of American interest in South-east Asia has also started a flow of more academic works. Two recent ones, under the auspices of Chicago University 2 and Institute of Pacific Relations, 3 are inaccurate about the interior and about Borneo generally. Borneo has long been a happy hunting ground for armchair authorship—starting from 'The adventures of Rueben Davidger.' 4

My own knowledge of the interior originated in the 1932 Oxford University Expedition to Sarawak, which concentrated on the Baram basin, though I also made a journey into the Rajang.5 We heard then of rich plains farther inland, and I remembered this when looking for a place behind the Japanese lines from which to initiate intelligence work and guerilla activities prior to Allied coastal landings. My fuller knowledge, arising from this, is based on a series of reconnaissance flights with the 13th U.S.A.A.F. and the R.A.A.F., December 1944 to February 1945; seaplane landings on the Rajang and Baram rivers; three parachute drops and subsequent foot journeys throughout the uplands-of which I was Military Commander; numerous flights from our upland airfield after June 1945; and subsequent extensive peacetime foot and canoe travels (totalling about 3000 miles) when I remained to rehabilitate the interior (until August 1946). As a result, I have covered most of the blanks on the map, visited the headwaters of the main river systems, crossed the interior in many directions, climbed the main peaks, and made inland-to-coast journeys via the Tinjar, Baram, Tutoh, Limbang, Trusan, Mentarang, Bahau, and Kayan rivers. As my studying was necessarily incidental to military duties, it is incomplete.6 The attached map is correspondingly rough.

- ¹ C. Miller, 'Black Borneo,' London, 1946.
- ² Fay-Cooper Cole, 'The peoples of Malaysia,' New York, 1945.
- 3 B. Lasker, 'Peoples of Southeast Asia,' New York, 1945.
- 4 J. Greenwood, 'The Adventures of Rueben Davidger, or seventeen years' captive among the Dyaks of Borneo,' London, 1865; cf. M. T. Perelaer, 'Ran away from the Dutch,' London, 1887.
- 5 T. H. Harrisson, "The Oxford University Expedition to Sarawak, 1932," Geogr. J. 82 (1933) 385-410.
- ⁶ I hope to fill in gaps during 1947-48, when I shall once more be alone in the Uplands, on behalf of the Sarawak Government. A quantity of observations have been made, including time and compass traverses and panoramas from mountain peaks. It is hoped to collate these data presently if (as now seems probable for climatic and other reasons) an early aerial survey of the uplands proves impossible.

I owe much to my comrades-in-arms, especially G. S. Carter, D.S.O. and George Crowther of Sarawak Oilfields, N. G. P. Combe, M.C. (British North Borneo Service), and W. L. P. Sochon, D.S.O. (Sarawak Government); also to Paul Bartram, Col. John Chapman-Walker, O.B.E., Lt.-Cols. J. Courtney, M.C. and J. Findlay, O.B.E., K. Digby and the Sarawak Gazette, D. Leach and the Sarawak Survey Department, C. H. Southwell (Borneo Evangelical Mission), W. S. Singall (Dutch District Officer), Dr. E. Schneeberger and P. M. Synge. But above all to those illiterate Kelabit and other tribal chiefs, led by Penghulu Lawai, B.E.M., who from first to last treated us as their own sons, thus making this paper (and much else) possible. I have to thank P. M. Synge and G. S. Carter for some of the photographs.

The far Uplands

The little-known interior of this great island can conveniently be considered in three diminishing blocks:

- r. Behind the coastal plains—inhabited almost entirely by Muhammedans, Chinese, and the small white population—is the Interior, where hills and jungle take control. Over most of Borneo, this interior starts within 20 miles of the coast. It is inhabited by pagan tribes, including Dayaks, Kayans, Kenyahs, Dusuns, and the hill tribes. These groups have different languages, but many physical and cultural characteristics in common. They live in the long-house type of village community. Most cultivate rice in jungle clearings. All have straight black hair and medium-brown skins.
- 2. Far within the interior, in an irregular box formation across the northern headwaters, lie formidable mountain barriers; here the rivers become too rocky and rapid to be normally navigable. Beyond and behind these tangled ranges are the Uplands, inhabited by the hill tribes—people who walk (or slither) everywhere, and have a correspondingly strong, tough physique and character.
- 3. In the very heart of the Uplands, where Sarawak, British North Borneo, and Dutch Borneo meet, are curious plains—the Tablelands.

This paper is not concerned with the interior as a whole but with the seldom-visited Uplands, including the most interesting central Tablelands. There is generally a 6000-foot mountain belt, inhabited only by nomadic Punans, dividing the uplands from the interior lowlands, where travel is in relative comfort by canoe on navigable rivers. The line of definition varies in distance from the sea. On the Baram it is at Liomatu, nearly 200 miles from the mouth. On the Limbang it is at nearly the same distance. But on the Trusan the land rises rapidly about 25 miles inland. The Mentarang is navigable for some 100 miles up to Long Berang; then there are about 13 miles of quite impossible water, until with the Kerayan and Bawang tributaries there is open, muddy water which can be travelled in the flimsiest canoes. Every river rising in the uplands has some such major break of gorge and fall, varying from 15 to 50 miles in width.

To the east, around the head of the Mentarang river in Dutch Borneo, the barrier is less defined than elsewhere. On the west side, the barrier is most complete in the headwaters of the Limbang and Tutoh rivers; it took me eight

days' hard going to cross this barrier from the Limbang into the inhabited uplands of Libbun and Trusan. No hill man I met had attempted to cross the barrier from the last river village on the Malinau to the first upland village on the Seridan river farther up the Tutoh. But according to the indefatigable Punans—who are able to travel continuously, living off wild sago-palm and game shot with the blowpipe—it takes a month. This part of the barrier is a serious obstacle to hill people on the Seridan. Some years ago a party tried to break through by canoe. Nothing more has been heard of them although some decades ago several parties succeeded.

The barrier to canoe continuity is of importance culturally and historically. For centuries it partly cut off the uplands from the river peoples and from intimate commerce with the coast. It left most of the uplands in comparative isolation, to develop their rather different way of life. It gave the hill peoples an independence of economy and outlook, which incidentally proved invaluable in the war when they made first-class guerilla fighters.

The uplands, although almost on the Equator, are comparatively cool. At night, at least one blanket is required. It is hot in the daytime, though seldom oppressively so. The rainfall averages probably 200 inches a year. During my first eighteen months, it only rained three times during the morning. There are occasional periods without rain—a week is my record. The coastal monsoon is obscured, since mountains screen the area from wind-carried rains. This creates a daily rhythm. Although there are few seasonal changes, there is a distinct periodicity in animal and plant life. This distinct persistence of lifecycles is parallel to those already described by the Oxford Expedition to the New Hebrides 2 under somewhat similarly equable conditions.

Although the climate is comparatively pleasant, it is extremely damp both overhead and underfoot. During the night, cloud forms in each valley bottom. It rises with the sun, clearing after about three hours. When planning parachute entries, we wasted weeks flying over at dawn when the lower ground (with possible clearings) was always obscured. Flying as we then were without maps and from very long range (since the Allies held no point nearer than Morotai in the Halmaheras), the time available to cruise around looking for an opening in the cloud was only measurable in minutes. Resultant abortive flights put a strain on all personnel and lost us several Liberators. In the end, tired of delay, we dropped through cloud. The first four landed exactly on that Bario tableland of which I had heard thirteen years before. The others dropped into jungle; it was only through the junglecraft of Captain Eric Edmeades, M.C. (now of the Sarawak Constabulary) that they eventually regained contact.

It is easy to get lost in this Upland jungle. Apart from the jungle's featureless density, in the Uplands the chaos of crossing and recrossing ranges and streams, running in all directions, adds considerably to the difficulties of direction finding (and keeping). In an attack on a Japanese post near the head of the Sembakong river (north border of Dutch Borneo), one of our guerillas was slightly wounded and lost touch with his troop under Captain F. Blondeel, M.c.

¹ T. Harrisson, "Notes on nomadic Punans" Sarawak Museum J. 5 (1949) no. 1. p. 130. ² J. R. Baker and T. H. Harrisson, "The seasons in a tropical rain-forest (New Hebrides)," J. Linnean Soc. London, Zoology, 39 (1936) 443-62, 507-18, et. seq.

After a week, in accordance with local custom, his relatives celebrated his departure to the other world by slaughtering his cattle and converting his surplus rice store into alcohol. During the orgy that ensued he reappeared. He had cut his way with a home-made knife for eight days across the ranges, emerging by chance on a river which he recognized from a previous hunting trip. On another occasion, Sergeant W. Nibbs (an Australian parachutist with over a hundred jumps to his credit) was ambushed by Japanese. He had to jump off the track; in doing so, he lost touch with his companions. It took him two days' hard slogging before he could find a way back to the village which he had just left. Others (including local people) are lost, never to return.

Although this jungle closely corresponds to that of the lowlands, the Uplands can properly be regarded as a broad ecological and cultural unit. The outer fringes are characterized geologically by wide strata of quartzite with shales, like those west of the Sembakong or along the Toeboe and Kaloen on the eastern edge of the Uplands, with a similar formation on the south-west side, in the middle-waters of the Baram near Liomatu. From the upper Baram north runs a wide, erratic belt of friable limestone, of which the whole peaks of Murud, Batu Lawi, and Apad Runan are composed. South, on the Bahau, there are varied sandstones, frequently in close-layered formation, including a "pepper-and-salt" type found throughout the Central Uplands. A conspicuous feature, while footslogging through so much uniform jungle and mud, is some sudden area of red clay. Basins of this, intermixed with sandy shales and very fine friable sand, commonly appear in areas of tableland already mentioned. These have remained little studied since St. John mentioned with disbelief Limbang native accounts of far inland "smooth water which stretched for several days' journey, flowing gently through a vast tableland; of the tame goats without masters which thronged this region—but I could find no one who had seen any of these wonders"—a fair exaggeration of the upper Kerayan!

Tablelands

The principal flat, rich lands (see map) are around Bario and in the headwaters of the Libbun; at Bah Kalalan in the head of the Trusan; at Bawang and Balawit; and again at Lemboedoet and Pa Koerid farther south on tributaries of the Kerayan; and along the main Kerayan in the district of Benoeang. All lie within a narrow rectangle about 30 miles north and south, 15 east and west, and over 3000 feet above sea-level, mainly in Dutch territory.

I found subsidiary pockets of the same nature in Sarawak on the upper Trusan, on the Balleh and Balong above their junction with the Baram, and in one or two places on the Tutoh; in Dutch Borneo on the Poedjoengan and Berau tributaries of the Bahau. The upper Baram river people describe more of this terrain on the Danum and Plieran branches of the Rejang, which they once inhabited in large numbers.

In all, these pockets of tableland cover little over a thousand square miles. But they are richly different from anything else in the interior, a difference striking not only to the outsider but to native mentality in general. The shock

of pleasure when emerging into one of these tablelands after a long jungle spell is best recaptured from my diary:

"After weeks with an horizon of not more than 30 yards, the sun always obscured by the forest canopy, I feel literally faint on coming out into the open, the clear sunlight, the perspective of distance, flatness, intense fertility, still water, colours other than green, a complete view of clouds or stars, and the rain pushing straight into you instead of dripping down your back off the branches. Above all, the conviction that you can walk twenty paces without collecting another leech."

Brigadier Fergusson t well describes the same sensation after two months in the perhaps less severe jungles of Burma, on emerging into Kachin rice fields, "this smiling valley" which left him "gasping at its beauty." The Borneo tablelands are divided up into a beautiful checkerboard of fields dotted with long-houses, rice huts, and pig-sties. The inhabitants have cunningly carried hillside trickles to irrigate miles of valley and, in Dutch Borneo, bamboo pipes bring spring water direct to the long-houses for cooking and washing (they seldom drink water). Although the Tablelands teem with buffalo and humpedback cattle, these are not used to till (or for milk). Rice crops are nevertheless extensive, and these are supplemented by fruit, vegetables, pigs, goats, fowls, spring salt, and leaf tobacco. Whereas the lowlands are frequently short of food—in 1946 the Kayan and Baram rivers were near starvation—the upland people generally, and the tableland people in particular, have an abundance. Thus I was able, without previous arrangement, in a few days to buy enough surplus rice (at 112d. a lb.) to supply the whole war-affected population of sub-coastal Brunei Bay and north-east Dutch Borneo.

The Bario plain in Sarawak (on which we first dropped) was the poorest tableland. We discovered the larger, richer Dutch ones when one of my medical orderlies, Sergeant F. Sanderson, D.C.M., went east to investigate a report of some shot-down American airmen surviving in that direction. I quickly moved my headquarters to this lovely district, which gave abundant food and labour as well as better access north-west to Brunei Bay, north to the Padas, east towards Tarakan Island and other Allied objectives. Later, after the Tarakan landing had brought planes within reasonable flying range, we were able to build an airfield here, with benefit to ourselves and to American airmen we rescued. (One afterwards wrote a stirring tale of how he rescued us!)

In addition to these plains, there are extensive rolling grasslands in the headwaters of the Bahau. These too are wonderful to enter after a long period of jungle. I first saw them from the air in a 1944 reconnaissance flight. They looked too rough, too eroded, to be suitable for parachute operations. But later (after ground reconnaissance by Lieut. J. Westley, M.B.E.) I was dropped there on an emergency job, to save several weeks' walking. In 1946 I travelled on foot from Bario back into these grasslands—a twelve days' walk (30 minutes flying). Despite its pleasant appearance, this is not good country. A hard sandy clay with thin top soil radiates intense sun-heat; flies and mosquitoes abound; the ground is poor; the people are correspondingly poor. The most striking feature is the quantity of game, including the largest species of red

Bernard Fergusson, 'The wild green earth,' p. 82. London, 1946.

deer and many wild cattle. These give a park-like appearance as they browse on the beautiful pale-green hillsides, with the impassable Bahau a silver line of loveliness far below.

Warrant Officer Macpherson, M.M., also located similar small grassland areas around Iburu and Bole on the Meligan tributary of the Padas (British North Borneo). As there were no other suitable open spaces in the area, we developed and extensively used this zone in dropping operations around Japanese G.H.Q. at Tomani on the middle Padas.

The spinal range

Within the mountain barrier and throughout the Uplands run a multitude of small ranges, such as the Sarawak Tamabos. Only one is really symmetrical, the spinal range, which runs continuously at 5000 feet and up to 7000 feet north and south from its low passes between Kayan and Rajang rivers (behind Long Nawang) through Batu Kalong. It passes the source of the Baram behind Apad Runan, and then drops slightly before the spurs of the Murud complex at above 7500 feet. It then passes into the Trusan and runs between British North Borneo and northern Sarawak, on for another 100 miles into the Crocker Range. Thus for 300 miles there is no divide, until the gorge where the lower Padas, turning after its long course north from the Uplands breaks westward into Brunei Bay.

The whole way along the spinal range on the western side, rivers run fairly directly westward. On the eastern side the valley levels tend to be higher, the rivers to run much more erratically and often parallel with the range. Innumerable others radiate out from the spine—the irregular ribs of Central Borneo. There is always a range awaiting you at right-angles to any line of march and there is no avoiding constant climbs up and down.

Just as the barrier around the Uplands has separated lowland life and rhythm, so the tempo of life within the Uplands has been largely determined by the spinal range, which was also naturally taken as a boundary by the various governments when first they penetrated the interior. Its height over long distances closes regular human intercourse from one side to the other. Thus the journey from the Baram into the Bahau is, for loaded men, an arduous one, and there is now no other pass for 80 miles southward except a very occasional crossing made by the Kenyah river people. The passes are mostly in the central strip, three of them from the Libbun and the Bario area to the upper Kerayan and Bawang Tablelands. In this area there is thus easy trade and even intermarriage east and west, unregulated by governments or political boundaries. This undoubtedly gives vitality. Those who live in the headwaters of the Dutch rivers farther south or in the upper Padas farther north must rely for their only outside contacts on rivers difficult (or impossible) to navigate in either direction.

Over the interior as a whole the complexity of ranges makes travel and identification of position difficult. Unlike Burma, there is little logical pattern—what Fergusson calls "tilt"—and survey is complicated by a severe lack of landmarks. If you do see a range, if looks much like any other and, as maps were completely unreliable and air crews had no ground knowledge, we were

constantly in difficulty over the dropping of parachute supplies, on which we entirely depended during the first months of 1945 prior to Allied coastal landings.

The only easily identified upland features are:

- (1) The twin limestone peaks of Batu Lawi (climbed by me in 1946).
- (2) Mount Murud, fairly well defined with its flattened top, but almost always in cloud (climbed, 1946). This would now seem, from observations made by myself on Batu Lawi and by D. L. Leach, Director of Lands and Surveys, Sarawak, from Mulu, to be higher than Mulu, and thus the highest mountain in Sarawak, at about 8000 feet.
- (3) The rounded dome of Batu Song, visible from few angles owing to surrounding obstructions (unclimbed).
- (4) The saddle peak of Kalulong, about 4000 feet (climbed by the Oxford Expedition, 1932). 1
- (5) Massive Mount Mulu (7898 feet), again constantly in cloud (climbed by E. Shackleton on the Oxford Expedition, 1932).

By the time I left, in August 1946, I was beginning to get to know many of these and other features, having seen them from various angles. Even so, identification was difficult. On these matters native informants are not to be relied upon. Apart from the hunting Kelabits, the hill peoples have had little occasion to travel outside their own localities except on a few wellworn trading routes. Competition among the Kelabits drives them higher, or farther afield. In particular, they make clearings, "rides," on peaks and passes, which are "doors" for the passage of ancestral spirits to the after-life. If a man makes a "door" for his father, a rival will seek to make one higher, farther away, and with greater expense of the manpower which he has to entertain with food and drink during the job, thus showing his wealth and filial devotion. When Dr. Mjöberg 2 attempted to climb Murud for the first time, Kelabits would not accompany him because they feared the cliff spirits. But afterwards, an upper-class man decided to make a "door" there. This was enterprising of him, since the ascent of Murud involves hard travel through uninhabited mountainous country and a difficult last 1000 feet of rock face. He made his "door" a little above the point where Mjöberg camped. In 1945, from another range, I noticed that this door was not at the top; so, when I climbed Murud to take survey bearings, I capped them all! I always made "doors" on new peaks and passes, as otherwise the local inhabitants might have become involved in much tiresome door-making competition. I now have memorials sufficient to reach back to my great-great-grandparents and a high local reputation for dutifulness.

In April 1946 I succeeded in climbing the lower, "female," pinnacle of Batu Lawi with six Kelabits from the village of Bario, where our original party dropped. In a grotto just under the summit I put a plaque in memory of Squadron-Leader Graham Pockley, D.F.C., and Major Ben Ellis, a pioneer

¹ See T. Harrisson, Geogr. J. 82 (1933) 393.

² E. Mjoberg, 'Forest life and adventures in the Malay archipelago,' p. 153. London, 1930.

British parachutist, who were responsible for our original insertion by Liberator into Borneo and were shot down on the long flight back to the Philippines. The lower peak is almost devoid of vegetation. The only possible ascent is from the saddle between the two pinnacles, along a knife-edge ridge varying from 10 feet to 1 foot wide, between 700 to 1200-feet precipices. The view from the summit is superb, commanding the whole interior. The "male" peak is slightly higher and unclimbable for the last 400 feet. Upon it lived the only peregrine falcon I have seen in more than two years' Borneo travel.

Along some of the valleys around Batu Lawi and north of Murud, there are long wide stretches of immense boulders with the appearance of a great moraine borne from Murud, scouring out the great basin in the head of the Limbang. This is most difficult country to travel, picking a way among gigantic rocks, often over deep chasms and subterranean watercourses, crevasses disguised by coverings of moss and a peculiar dwarf palm. At one point the Limbang disappears underground in this area—another story St. John heard and disbelieved in 1858.

The headwaters of the Limbang are especially misrepresented on existing maps. The last stretch of this fine river curves round east of Batu Lawi and rises in the Murud foothills, instead of running miles to the west as it is always shown. Thus, within a radius of one mile from Murud, the Limbang rises to flow south-west and west to Brunei Bay; the main tributaries of the Trusan rise to flow almost due north into Brunei Bay; the farthest headwater of the Baram (the Libbun) rises to flow due south for hundreds of miles to the west coast near Miri; and important headwaters of the Kerayan and Mentarang rivers rise to flow east to the opposite coast of Borneo and form the great delta facing the Tarakan oilfields. Murud is, in this sense, the geographical heart of Borneo, centre of mighty rivers and crown of the spinal range.

The moraine type of land in the Limbang is uninhabitable. But in some of the lesser valleys, here and elsewhere in the Uplands, there are fertile areas which have clearly been inhabited in the past. There are indeed many indications that the population of the interior was once far greater than it is to-day. The hill tribes leave their mark on any area they have inhabited by their peculiar stone monuments and carvings, and I have travelled for a week through country now uninhabited, bearing many such sad signatures of past fertility. But most of the central mountains are still virgin forest. Around the summits this gives place to the strange fairy-world of stunted trees, orchids, pitcher plants, and moss which the Oxford Expedition has already fully described 1 as "moss forest"-abominable stuff to struggle through or camp on, let alone in which to hunt Japanese. A peculiar form of irregular "moss forest" appears at lower levels in valley pockets, noticeably on the lower stretches of the Bario-Libbun tableland, characterized by numerous olivaceous shrubs, rhododendrons, pitcher plants, and quantities of stag's horn (Lycopodium) on a white sandy soil.

^c T. H. Harrisson, Geogr. J. 82 (1933) 393, 405; T. Harrisson and C. H. Hartley, Bul. Brit. Ornithological Club, 54 (1934) 148; and H. N. Dixon, J. Linnean Soc. London, Botany, 50 (1935) 57.

Living in the jungle

The Uplands are unified not only by topography (as already described) but also by the problems of life which topography, climate, soil, and isolation impose upon the people. For instance, throughout the Uplands it is rare to travel on flat ground for more than a hundred yards. The ground is often rocky, always leech-infested, and everywhere obstructed by fallen timber which constantly changes the direction of paths—it is less trouble to walk round than to cut through. There are no pack tracks, but innumerable river crossings. The hill people are thus expert walkers. They also specialize in placing long branches or tree-trunks along tracks, notching these into small steps on slopes. They have remarkable balance, and move barefooted along single branch bridges—sometimes over deep gulleys or cliff-faces—without any difficulty.

In the large jungle expanses without man-made tracks, there are generally the remains of faint rhinoceros trails which can be cleared with the native-made and highly efficient bush knives. The pygmy rhinoceros (*Rhinoceros sumatrensis*) is now probably extinct in Sarawak, due to the heavy demand for its horn, valued by the Chinese for medical and aphrodisiac purposes. There are some in the southern part of British North Borneo, and I saw a fresh track on the 5000-foot divide between the Poedjoengan and Kayan rivers in October 1945. The numbers—never great—were rapidly thinned out once firearms became available inland. Prices rose, and in the 'thirties the relics of a rhinoceros were worth a fortune in steel, cloth, and shot to the Upland people. The rhino, with its heavy body and its habit of breaking down small trees for the leaves, is easy to track. As it became scarcer and shier, parties followed a trail for weeks on end along the ranges.

When hunting or exploring it is not usually possible to carry rice for more than a fortnight at the most. At first this prospect is somewhat depressing to the outsider. Even the idea of living off the cultivated and richly inhabited parts of the country was too much for most of my Australian personnel, who preferred to eat tinned beans rather than fresh. The gallant fellows could only be panicked by one thing in war—the loss of a tin-opener. But previous experience in the New Hebrides 2 had convinced me that the best way to live in a country was to live off it. Where there is a successful native population, it stands to reason their diet is as good as any you can (with difficulty) import. During the latter part of my stay I was entirely on my own and without facilities for receiving regular supplies. I then found it was possible to live satisfactorily even in uninhabited jungle areas, provided one moved slowly.

Take from my notes the second week of four I spent on one jungle trip investigating rhinoceros distribution. I was with six Kelabits, carrying a 303 rifle and several blowpipes;

Day 8. Shot two mouse-deer on river bank. Caught fourteen fish in stream by native trap-net. Recovered bread-fruit floating in river. Palm and bamboo shoots. Rice.

¹ See T. Harrisson in Malayan Nature Journal, 1949 (in press), on "The large mammals of Borneo."

² T. Harrisson, 'Savage civilization,' London, 1937; and Geogr. J. 88 (1936) 97-127, 243-61, 332-41.

Day 9. Got 5-foot water lizard sunning on rock: like mutton. Caught fat pig in trap. Quantity of fruit like mangoes. Plenty of sago, some reed centres. Rice reserves low.

Day to. Met party of nomadic Punans with dried pork. Shot 6-lb. fish in pool. Tinamou's eggs. Finished our rice.

Day 11. Small fish caught by blocking side-stream. Shot monkey—liver excellent. Found old pineapples and ate leaf bases, just like artichoke. Salad from species of cucumber leaf. Prepared Punan sago.

Day 12. Thirty fish of grayling type. Some edible rush stems. Shot a big lizard; tough. More sago.

Day 13. Green bananas for cooking. Found giant jungle bean; pods up to 18 inches, slightly bitter raw, sweeter cooked. Sago.

Day 14. Shot 70-lb. fallow deer, and a splendid male argus pheasant. Much small fruit. Palm-tops and sago. Wild oranges.

Of course, in or near inhabited areas rice is the staple diet, eaten three times a day, mainly with dried or high pork and delicious fresh fern-tops. The white man however requires more fruit and vegetables. These are easy enough to obtain if you know what is available—for the people will seldom think of telling you. After months I was still learning of delicious new things to eat—for instance, ginger tops, a sort of orchid stem, a special scarlet epiphyte, and a large white toadstool.

I augmented my food supplies with seeds brought from Australia. Some Javanese whom we rescued from the Japanese at various times made first-class gardens at several tableland villages. Here we grew potatoes, tomatoes of several varieties, shallots and spring onions, cabbage (with only moderate success), lettuce, silver beet, monster radishes, egg fruit, spinach, marrows and pumpkins. Their seeds were subsequently distributed to villages all over the interior and I hope will flourish.

THE HILL PEOPLES

So little study has been made of the upland peoples that the general unity of the population has not been recognized. The division of the interior into three territories previously prevented anyone moving freely over the uplands as a whole. But in 1945 and 1946 the only boundary was war, and I happened to be the only effective authority throughout the uplands. Pollard i noticed affinities between the Trusan Muruts and the Baram Kelabits; and the Muruts nearer the sea have been broadly described. In general however, whereas we know a good deal of the lowland river peoples, we know extremely little of the hill peoples. Many textbooks appear unaware of their very existence. As I came to be the first white man to live in the uplands and to travel them widely, I can add to the existing data.

The main elements of Borneo population are fairly clear-cut. All Chinese, Malays and native Muhammedans live in the coastal and sub-coastal belt.

¹ F. H. Pollard, Sarawah Mus. J. 4 (1935) 223.

² Owen Rutter, 'The pagans of north Borneo,' London, 1929; C. Hose and W. McDougall, 'The pagan tribes of Borneo,' London, 1912.

With few exceptions the well-known Dayaks inhabit the sub-coastal belt. In the interior lowlands are the river groups, canoe people, principally the Kenyah, Kayan, and related types. Within these again are the hill groups of the uplands whose geography I have already described. The mountain divide between lowland and upland is inhabited by a number of groups of nomadic Punans.

The distribution of the hill peoples is complicated. Thus the hill Muruts overlap to the coast at Lawas, while the river Kenyahs on the Dutch side have been edging up-river and pushing back the Beraus. But despite intricacies of tribal relationship, it is possible to define a distinct hill group at the present time, and one which relates in several respects to other hill peoples in Burma, Indo-China, the Philippines, and elsewhere. The Borneo hill people cover about 10,000 square miles, in the chaotic network of valleys and rivers which constitute the Uplands as already defined.

Although in some places they can use canoes, these are always crude and foot travel is the regular mode. Hillmen would rather walk; the river people are generally reluctant to walk at all. I was once on a difficult stretch of the journey with river Kenyahs up the Kayan river; we were held up by one of those floods liable to happen there at any time of year. We had been travelling for twelve days without adequate food, for two days living on green bananas, as there is no original jungle left near the river for hunting and foraging. The winding river at this point suggested that by intelligent walking we could probably soon reach the next long-house. But the Kenyahs would not have this at any price. With one hill man as my companion, I reached the village that afternoon and fed well for three days—until the arrival of the canoe crew, now half-starved.

The hill people are divided into several fairly distinct groups, although no rigid classification is practicable:

Name in common Upland use	Approx. total population(mid-1946)	Main distribution
Muruts 2	75000+	Trusan and Lawas rivers and middle Limbang (Sarawak); south of British North Borneo border (Dutch Borneo).
Ротокѕ	18,000	North-west Dutch Borneo, excluding tablelands.
MILAUS	2100	Main Kerayan Tablelands (Dutch Borneo).
Brians	c. 3200	Tablelands in extreme north-west corner of Dutch Borneo.
Kelabits	1800	See below.
Sabans (and Tabu	Ns) 300	On the extreme upper Baram and Bahau (Dutch Borneo), and the Madalam tributary of the Limbang (Sarawak).

¹ There is no "proper" spelling of this term, and Kenya (Kenja in Dutch) is equally apposite on some pronunciations. All these terms are externally imposed.

The Adangs mentioned by St. John (op. cit.) and by Hose and McDougall (op. cit.) are only the upper-Limbang branch of Muruts, named after a river which they have

The present-day total is thus under 50,000, a shadow of the past population but still a sufficient nucleus to turn the fertile uplands presently into a dynamo of Borneo culture.

Around the hill population there are transitional groups, especially the few remaining Beraus on the remote upper Bahau and the wild Kaloen, among whom I stopped for a time. Hose and MacDougall previously heard of them as "Trings" or "Apu Asing." They appear to be something between the hill people of Murut type and the nomadic Punans, with peculiar customs (e.g. no long-houses) and intense superstitions of their own. In the south-west of British North Borneo the Muruts merge into the Tagals. Some of these are topographically hill people, but part at least differ in physique, language, house construction (a central dancing "pit" instead of verandah), ethics, morals, and methods of agriculture (largely root crops). The Muruts of the Padas and Potoks of the Mentarang will not allow the Tagals as any relations of theirs, especially since they murdered several shot-down American airmen, distributing their heads for ritual purposes. This treachery infuriated others who ran great risks assisting these airmen. The plain Dusuns much farther north are something between hill and river people, all of whom presumably come from one main stock.

All these hill people (as berein defined) share one type of language, though subject to considerable local variation—the Kelabits, for instance, slurring and clicking phrases almost out of recognition. All prefer small villages operating in communities of 50 to 150 rather than the larger units favoured by river people. They make a type of long-house lacking room partitions. And they are great hunters and farmers. The river people, often with easier land, are frequently short of rice and other staples; this is rare in the hills. The hill way of life tends to make the people more energetic and virile; thus during the war they proved outstandingly bold as guerillas. On the whole, I found these peoples more logical and sensible than any others I know—of course there are many individual exceptions. They are less restricted by superstition and illogical fear than the lowlanders, more capable of weighing up a case on its merits. They use precedent as a guide rather than as doctrine.

One of the least known of the hill groups is the Kelabit, previously described only passim, notably by Banks in connection with their stone monuments. They now inhabit the remotest part of Borneo and have remained in some ways more intact than other Borneo peoples. Having originally been dropped among them, and having to use them as the base-line of most upland activities for eighteen months, I came to esteem them highly. Despite serious faults, including snobbery, boasting, and alcoholism, they proved intelligent, gay, sane, loyal, and consistent both in war and peace.

now vacated in favour of the Trusan. Other terms are also used. My travels northeastward did not extend beyond the mid-Padas, and I am uncertain of the exact definition of Murut territory and their relationship to the Tagals in particular. Rutter (op. cit.) and some others have never gained a complete view and experience of the upcountry Muruts, and the position is less clear for that. In fact, the whole definition of these groups in Sarawak and North Borneo is most confused and even contradictory. I hope to elucidate the matter further by research on the spot.

¹ E. Banks, Sarawak Mus. J. 4 (1935) 405; also cf. T. Harrisson in J. South Seas Soc. (1949) (in press).

Kelabit life and death

The Kelabits to-day number under 2000, concentrated in twenty-two small villages of the farthest Borneo hinterland above 3000 feet, thus:

Two in headwaters on eastern slopes of the spinal range (Dutch Borneo). Four on the Madihit, headwaters of the Limbang (Sarawak).

Five in Tutoh tributaries of the Baram (Sarawak).

Eleven at the head of the Libbun and Kelapan (Baram)—one mixed with Sabans.

Single families also live in several river villages on the Baram.

The most striking thing about the Kelabit is his appearance. Many Kelabit men are decidedly tall, and noticeably long in the leg and strong, though slender, in the thigh. This is presumably an adaptation to mountain life, for here you must not only walk, but climb. Kelabit children are agile and tough, their parents particularly devoted. I have seldom heard an angry word spoken to a child, though once or twice I have myself ached to administer a sharp smack to some naughty boy. Family life is generally stable so long as there are children; there is a wide measure of pre-marital promiscuity.

Both sexes are fond of ornament, more so than any other Borneans. Quantities of bright beads—some closely similar to specimens from Ur and ancient Egypt 1—are worn by both sexes, with large numbers of arm and leg bangles. The men wear clouded leopard teeth in the tops of their ears, a habit now almost extinct elsewhere. The women follow the unsightly custom of extending the ear-lobe below the shoulder by heavy weights; men extend their earlobes to a lesser degree. All of them, and especially the women, make up for lack of looks by an open, jolly disposition. They are warm-hearted and responsive. Laughter is the commonest noise of their long-house life. They laugh at much the same kind of thing as we do—but we do it less often.

The long-houses have a central wall full-length down the house, with a social and bachelor verandah on the front side, numerous family rooms down the back, the whole on posts 5 to 20 feet above ground. Kelabit houses are especially well made and completely walled in, light being admitted by movable panels in the leaf-thatch roofing. This gives an extra closeness and cosiness, and is a necessary measure against the cold winds blowing down from the encircling mountains. The natives sleep completely rolled up in mats alongside fires which are blown and revived through the night. The closeness of life is emphasized by the absence of partitions in the family quarters. Each family has a marked-off section, but you can and do walk freely up and down the back. Everyone can see what everyone else is doing, down to the least domestic detail. Naturally this leads to a give and take, a comradeship not found among the walled-off room-living river people.

The stranger finds this rather exhausting. Not only do Kelabits not require privacy; they cannot realize that anyone else can require it. I was never able to keep people out of the personal hut I built at Bario after the war. At times I felt I must be alone to do accounts or write a report. I would put two police at the door with orders that "even Tuan Rajah may not enter," and threat of

¹ H. C. Beck, Man 30 (1930) 134; T. Harrisson, paper to the 7th Pacific Science Congress, New Zealand, 1949. (To be published in the J. Polynesian Soc.)

dire fine if anyone got in. But as the police were themselves Kelabits, it was futile. In the end I gave it up. Of course, in a long-house it is far worse. All night long there is noise. Adults require remarkably little sleep. It is common form to sit up and talk till 2 or 3 a.m., and to wake and start talking at 5.30. Drinking parties often begin at midday and go on till dawn.

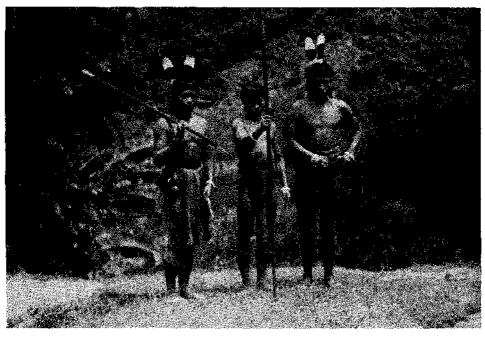
They also like to sing and to play their four-string bamboo mandolins before daylight. They do this nicely; but no music is really nice at that hour, what with the cocks (which freely roam the house) uproaring the dawn, and the usual gang of small boys dashing around on some hunting game. Yet, once you are used to it, there are many compensations. Chief among these is the general atmosphere. There is no such thing as an outsider in a Kelabit home. You could not be one if you tried. This way of life leads families to share food and hospitality as easily as to share talk and laughter. The Kelabits are almost overwhelmingly hospitable—unlike some river folk. Under this social surface there is a strong class structure, and a slave element in the past sold or even slain like cattle. Class status almost entirely depends on heredity, related to the possession of the older type of brown pottery Chinese vase (? Ming and sometimes earlier) worth over froo in Kelabit values. There are less than a hundred of the oldest vases; aristocracy is correspondingly limited. Persons do not normally marry outside their class. Chiefs exercise considerable authority. Although women play a less direct part in influencing discussions and decisions, they do much to shape male opinion.

Within the upper classes there is a strong competitive individualism. Thus, the Kelabit country is a world of Rajahs and Tigers. There are men called "I am too great to work"; "Thousands work for me"; "When I summon all men come"; "A Thousand Bodies." Lawai, of Bario, started a vogue some years ago when he called himself "Tuan Resident." Another man countered this with "Head Tuan," to which another rapidly replied with "A Thousand Tuans." Then over at Kubaan a man named himself "Tuan Rajah"; another answered with "Rajah King"—only to receive an immediate reply "I ignore all Rajahs." All have now been eclipsed by a "Tuan Allah." Each male wants to demonstrate his superiority to the next. This is, of course, common to most men. Among the Kelabits it has been elevated to a focal interest, class conditioned.

A common form of boast is to say how many buffaloes, cattle, and fat pigs you have slaughtered in funeral celebrations for your relatives. The man who has killed most animals has the edge on all others. The worst insult you can pay a Kelabit is to tell him he is too mean to kill off his own animals for his father's memorial rites. Ambitious men are always stepping-up the pace by additional slaughters. In the old days, the main item of sacrifice was the large red deer, captured alive in traps and kept in pens, fattened by over-feeding. Since the pacification of the interior, the spread of water buffalo and humped-back cattle up from Brunei Bay gradually reduced the ritual importance of deer. This spread is even yet very incomplete. It is now proceeding southward over into the Bahau river, and similarly down the Tutoh on the Sarawak side. Within a surprisingly short time the Kelabits developed their own herds from Murut stock, and turned an import trade into export. They are now reluctant to sell females to the river tribes lest they breed on their own account.



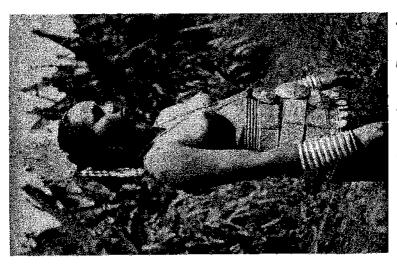
Kayans of the Baram river, Sarawak



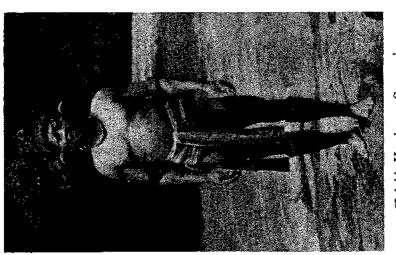
Tagals of the Murut group with blowpipes, North Borneo







Iban woman, sub-coastal area, Sarawak



Kelabit Headman, Sarawak

The hill people have correspondingly lost interest in goats, recorded from the upper Limbang ninety years ago by St. John. Goat's hair is still valued as decoration for sword handles, shields, and dancing hats.

Fine shields and swords—originally made from iron extracted from the ground—are mainly made by the Kenyahs on the Bahau river, though the Kelabits make their own everyday models. These Dutch Kenyahs are probably the best metal craftsmen in the country, making wonderfully delicate steel blades which they trade to Kelabit and other hill people in return for cattle, hill salt, and tobacco. Good specimens are highly valued and used only for show and ritual purposes. These material types of property are handed down from parent to child over generations. (Inheritance is from either parent, in a complex division between offspring of both sexes.)

The Kelabit himself is not so much a craftsman; he is primarily a farmer. Other inland peoples have long periods when they can do no work because of omen, superstition, and spirit propitiation rites. If the wrong bird or snake appears they abandon whole rice clearings. Indirectly influenced by Malay Christian teachers in the Dutch uplands and by myself, the Kelabits have in recent years abandoned all this, while retaining the rest of their beliefs and customs. They can thus work more nearly on a pattern of logic and plan, not so much on illogic and chance.

They take much trouble to cover their rice fields with an elaborate network of vines attached to bamboo clappers all around the edges and operated from a central hut. Along the centre of the field runs a log bridge about 7 feet above the ground. On this people walk all day long (once the rice is in ear) shouting and scaring the parrot-finches and doves. Dotted around are scare-crows and poles with windmill arrangements on top, creaking fearfully in the least breeze. Pig traps, generally spikes on to which the animal is frightened by a bamboo spring-clapper, are placed round the field.

Lest the rice fails, they are careful in rotation of crops. As soon as the wood felled in clearing the rice area has been burned off, they plant Indian corn; this ripens when the last rice stores may be running low. When the rice blades are about 3 or 4 inches high, manioc is planted; this matures about two months after the rice and is mainly used for fattening pigs. Cucumbers, shallots, marrows, sugar-cane, and the usual fruits are also cultivated.

The Kelabits grow much more rice than they need to eat. They may drink almost as much again. Every sort of event—especially the only too frequent death feast—is excuse for alcoholism. On the first death festival, the previously dried-out body of the deceased is removed from a tree-trunk coffin to a special site in the jungle. A drinking bout follows. On the second death feast, a year or more later, all the guests, after a great party, make a memorial to the deceased. This may be a cleared stretch ("door") on some high skyline; or a monument of upstanding stones, commonly in pairs, one taller than the other, and roughly resembling the extraordinary twin limestone peaks of Batu Lawi which dominate interior views; or a flat stone "table" (dolmen). There are also remarkable drawings and carvings in stone throughout the area and intricate legends associated with them. As always in Sarawak, the designs are dominated by an inability to draw straight lines, by the spiral obsession

of the crocodile tail, hornbill's casque, snake, leopard's teeth, or twisting vine.

A common excuse for alcoholism is the arrival of any distinguished visitor. Of all visitors, the white man is the most esteemed. The qualities they look for in a white are a sense of fun, approachability, good temper with firmness of decision; and (inevitably in the Kelabit mentality) a capacity for rice beer.

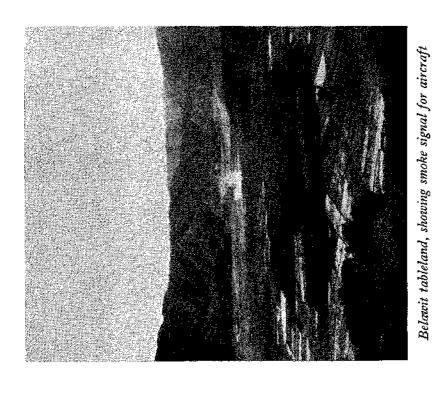
For the guest, the bombardment of rice beer is hard to take. Kelabit beer is weaker, more bitter than most varieties. It is served in porcelain dishes or plates, some of fine design. The stuff can be prepared in five days, unfortunately, since quantities can be prepared at news of your approach—which will always be at least a week ahead of you. The consequent "party" may involve anything up to sixty tall Chinese jars of beer, constantly replenished by adding water from bamboos.

The etiquette of such drinking is elaborate. The socially senior person is served first; the distinguished visitor has dish after dish pressed upon him. The lower classes sit out on the perimeter, until gradually all barriers break down and people are serving each other in all directions, amidst an indescribable babble of conversation and that loud laughter beloved of the Kelabit. The drinking is accompanied by songs in honour of the visitor, or in commemoration of past events. Kelabit singing is varied and dynamic. I doubt if the few previous visitors heard their rich native song styles, since they entertain usually by singing in the lowland manner. For they have (or had until 1945) a definite inferiority complex, feeling that they are up-country cousins, looked down on by the more sophisticated people nearer the coastal centres of government and education. This is not a negative feeling. It makes the Kelabits anxious to improve their status in relation to peoples more "fortunately" placed. They have indeed led Sarawak in abandoning restrictive customs based on superstition, without throwing over their whole past. And they have not, unlike many remote peoples, developed a mentality circumscribed by the accidents of their own geography. Their interests reach out over the great mountain ranges which encircle them. They are tirelessly interested in ideas, aeroplanes, Europe, the solar system, other peoples' customs and wars.

The Upland Future

The direct influence of the white man in the interior was extremely slight before the war; his indirect influence was important. Headhunting was brought under control in the lowlands at a fairly early stage in the country's governmental history. The relatively inaccessible upland peoples continued warring long after. This finally led to a series of harsh punitive expeditions which eventually convinced the hill folk that it was safer to keep quiet. Peace brought a new atmosphere; in place of the everlasting fear of sudden ambush, night-stalk or lightning raid. People could now concentrate on doing their jobs properly. Women could work without guards. Rice production soared—and people became increasingly alcoholic. This made them the more susceptible to those diseases which are usually the first contribution of white civilization.

Hillmen could now travel freely. The natural salt springs, good tobacco climate, vast jungle resources of wild rubber, damar resin, and rattan vine encouraged them to become exporters and to buy the few things they lacked





'Storepedos' released over upper Baram, Sarawak, 1945

—cattle, vases, cloth—from the lowlands. The process enlarged the outlook of isolated peoples, especially those like the Kelabits or Sabans, so isolated that no white man met one until over half a century after the first Rajah theoretically "governed" Sarawak.

Unfortunately the hill people paid their price not simply in salt, but equally in influenza, pneumonia, tuberculosis. The consequent depopulation in recent years led the people (especially Dutch Potoks) to turn increasingly towards Christianity, as energetically preached by several Malay missionaries. Those who have "become Christian" probably show an improvement in birth-rate and health since they adopted new rules of hygiene, abstinence and conduct. On the other hand, they tend to make duller fellows, sometimes to ape standards unnatural to themselves, and noticeably to indulge in petty theft, unknown among those still pagan.

The Japanese invasion had equally little direct effect on the Uplands. But it showed, first that the white man was no sort of unshakeable divinity, and then, later, that with all his faults he ran the country more for the benefit of its peoples than the yellow man could (or would).

In early 1945 the whites returned in all the glory of Liberator and parachute silk, to receive a tremendous ovation. Until then the hill people had no intimate knowledge of the white man's ideology except as interpreted (and somewhat distorted) by the few devoted missionaries. He had previously appeared as a sort of Halley's comet, occasionally whirling through the mountains, scattering needles, fishhooks, and hangovers. In the first months of 1945 the interior saw more white men than in all its past history. They dropped in, or later landed by Austercraft or Catalina. Many natives went to the coast for the first time—including sick who were flown out.

It was ironical enough that this return of the white man was to lead the now completely peaceful hill peoples back into the paths of pre-white headhunt and war. At first we had to rely largely on guerillas armed with native-made blowpipes, since we were operating so far from the nearest air base that we could not get sufficient other supplies. They were excellent weapons—light, silent, and deadly, since a wound may kill. With nearer air supply bases, we began to receive adequate rifles and automatic weapons, with which people soon became proficient. We also had, for the first time in the interior, adequate medical stores, an Australian doctor and two dressers, three Chinese dressers captured off the Japanese, and a first-class hospital supplied by air. Thousands of natives were employed in building an airfield; thousands more portering rice and ammunition; and several thousand fighting at distant points as soldiers. They can probably claim one of the finest records in the war—they killed more than one hundred Japanese for every guerilla lost.

It might be expected that these extraordinary changes in interior life would leave a deep mark on a people remote from civilization for untold centuries. Yet, when the war was over (we were fighting the Japanese in the uplands until November 1945), there was no fuss about closing down airfield or hospital. Within a couple of months it was difficult to realize that these mountains and plains had lately been seething with administrative and military activity, its repercussions reaching through Borneo to the sea on either side, with links as far away as the Philippines and Australia.

To-day the hill people are substantially carrying on where they left off. The war brought gains (particularly medical), but the lasting ones are that intangible widening of outlook and an attitude to the white man based on direct experience. Strange adventurers descended from the skies, several of them not the sort of men one would particularly choose as suitable for dealing with native people in ordinary times. But these Australians, some of whom tended to start off with a particularly violent colour-bar prejudice, adjusted themselves extraordinarily well. In fact, there is something about the hill people that reduces any white man to sympathy. And they on their side learned literally to love unassuming, able, and gallant soldiers like Sergeant F. Sanderson, D.C.M., and Dr. P. Henry, who operated their private army of Dayaks, Kelabits, and Tabuns on the Limbang; Lieutenant R. Pinkerton, M.C., who took Lawas with his Muruts; or Warrant-Officer J. Tredrea, M.M., who roamed Dutch Borneo with a hand-picked team of Potoks in remarkable adventure.

The war-time importance of the area has also overcome a good deal of the previous upland feeling of inferiority. With their particularly logical approach to life—less erratic and passive than the Malay, less superstitious and changeable than most river people—they should gain, in years to come, an increasing influence over affairs from which they have hitherto been excluded by the accidents of geography and by administrative neglect. In return, they will claim increasing educational, medical, and other services by which alone they can survive into the twenty-first century.

Borneo is *indivisible*. In guerilla war the only boundaries we could recognize were those of natural topography—the impassable ranges around Murud, for instance, or the frequently flooded Tutoh. For the first time interior natives themselves travelled any part of the interior freely to and fro, seeing it all, where previously one village had usually visited only the next few along the line. Every day and in many ways war demonstrated the advantage of treating the Uplands as a unity.

Something will have to be done in the future to reorientate Interior (and especially Upland) administration, and to establish effective liaison between the three administrations concerned. Even within Sarawak itself, the 4th and 5th Administrative Divisions cut the small "Kelabit country" in half, as well as putting an excessive strain on native cooperation, without rendering adequate service in return. One village has to travel for more than a month to pay taxes at Marudi on the Baram; another, two miles away, goes the other way to the lower Limbang, almost equally remote. Both journeys involve canoeing through country inhabited by alien and rather unfriendly people. None of the Kelabits have been administered from Lawas, a centre which most can reach entirely on foot—the method they prefer—through country inhabited by related Muruts.

In the past all three Borneo administrations have been too coastal-minded. The uplands certainly do present a problem for a white man who must have his whisky and soda at sundown. But because the people are fewer and farther away, that cannot in any sense reduce our responsibility. It is essential to eliminate not only the coastal-mindedness, but also a high degree of coastal domination. This is particularly marked on the Dutch side, where the Sultan

of Boelongan's territory is tretches inland to the Sarawak border. By a convenient dispensation of family rite, he is never permitted to go inland.

By and large, a new interior point of view is overdue. With it, the future of the Borneo Uplands and the adjacent lowland country of the interior can be pleasant, prosperous, and in accord both with the ethics of European and of pagan civilization. But if, for any reason, these are once more neglected, or if the three Governments concerned cannot work together on common problems, the 1945-46 story of unswerving loyalty, courage, commonsense, and sense of humour could become very different by 1956—in Borneo just as elsewhere in South-east Asia. No people could have served better or deserved better of white government than these illiterate, tough, cheerful, hard-drinking, dancing men and women of Central Borneo.

The preceding paper was read at the Evening Meeting of the Society on 6 January 1947.

DISCUSSION

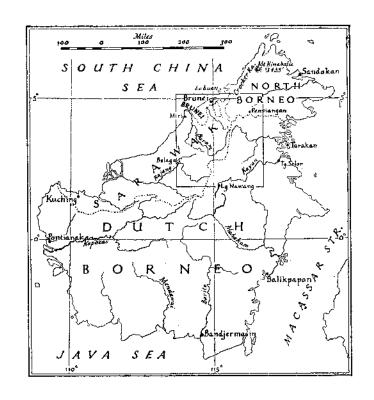
Before the paper the PRESIDENT (The Rt. Hon. LORD RENNELL OF RODD) said: We are glad to have with us Mr. Tom Harrisson who is perhaps better known to you on other subjects than that with which he is to deal this evening. His study of native races owes its origin to the anthropological training he obtained during his early work in the Pacific. In 1934 he went to the New Hebrides and during the period he spent there he studied the native population by living with them. He had similar opportunities in Borneo of studying the natives with whom he lived and fought.

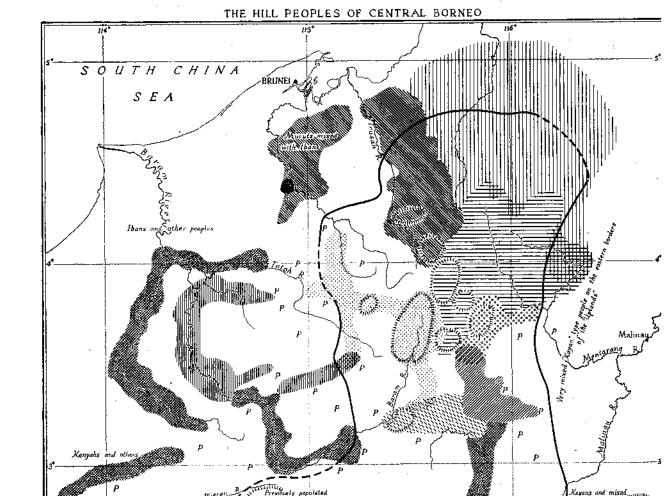
Mr. Harrisson then read his paper,

Colonel John Chapman-Walker: I had the honour to command for about three years from its inception the rather fantastic and peculiar organization of whose operations those described by Mr. Harrisson formed part. My experience has been that people at home have no conception of the immense distances covered in the war against Japan. Consequently an extraordinary veil of secrecy was drawn over everything the Japanese were doing in and among the islands. We knew little about what was going on under the Japanese occupation in Borneo until we started clandestine operations there. No military intelligence was forthcoming from the usual sources except for air photographs which are not always helpful in jungle country. There was a certain amount of opposition to unorthodox operations of this nature, and it was largely due to the vision and foresight of that great Australian, General Blamey, that operations of this type came into being. About two years before there was any military landing in Borneo, Colonel Chester went in by submarine and Mr. Harrisson went in some eight or nine months later.

One very important military aspect of the guerilla operations was the extent to which they enabled us to deny food to the Japanese. The invasion of Borneo was the last series of operations carried out by the Australian Army, and the occupation was incomplete at the time the Japanese war came to an end. Thus the real importance of these operations never came to the notice of the public. They would however have been very important from the point of view of the British operations against Malaya, then in course of preparation, because the

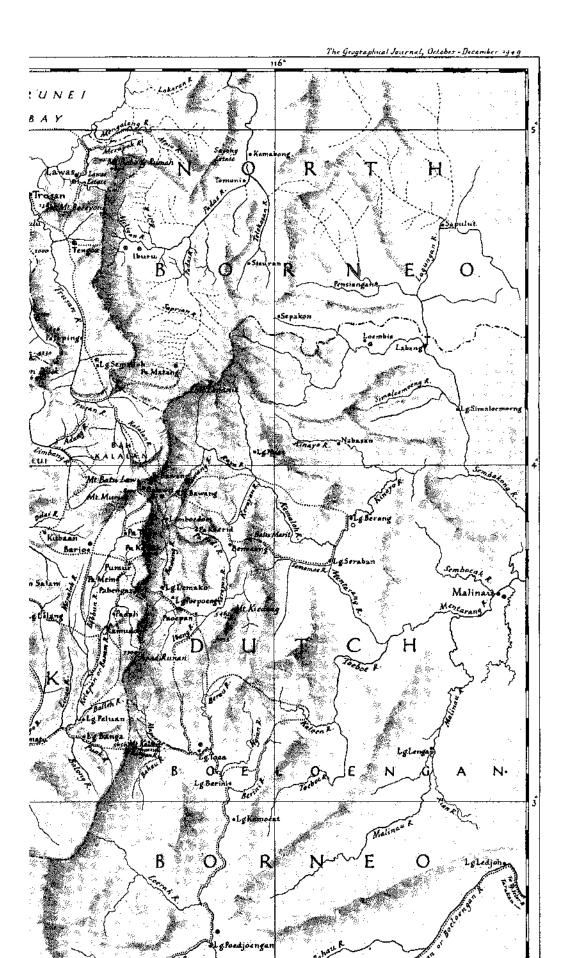
¹ The name Boelongan is also applied to the Batang Kajang (=Kayan) river in Dutch Borneo. The township, also known as Tanjong Selor, includes the Sultan's tasteless palace and administrative buildings. It lies in the delta of the great river system that flows out opposite the Tarakan oil-field.

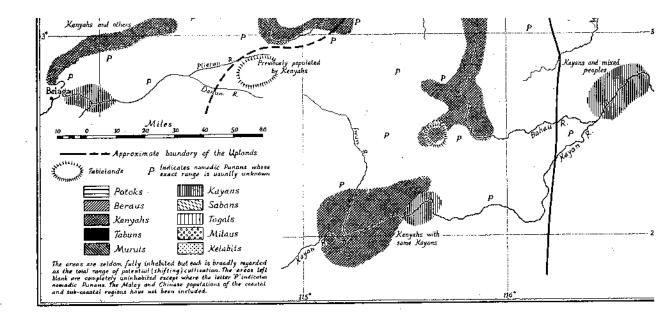


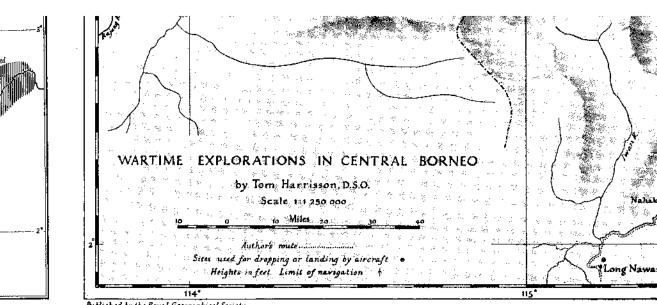


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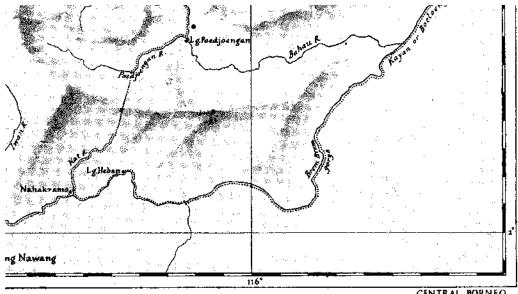
Malinay







Published by the Royal Geographical Society



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