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# EVEREST: THE 1951 RECONNAISSANCE OF THE SOUTHERN ROUTE

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When in 1924 Norton and Somervill so nearly reached the summit of Mount Everest, it was generally believed that the next expedition, taking advantage of the lessons they had learned, would most probably succeed. For, just as the 1922 parties in attempting to climb the last 4000 feet to the top in a single day had completely underestimated the physiological difficulties of climbing at great altitudes, so it seemed that the failure of the 1924 expedition was due to a simple, avoidable cause. That year the climbers had gone high too soon and had become involved in struggles with the early spring blizzards, which had so far drained their strength that when the time came to launch their attempts upon the summit the climbers were already exhausted. In 1933 we were confident that by carefully nursing the climbers, and the Sherpas chosen to go high, through the preliminary stages and by the use of comfortable, double-skinned tents at Camps III and IV, it would be possible to place several successive parties at a camp above 27,000 feet with their reserves of strength largely unimpaired, and well able to overcome the last 2000 feet.

Once again we found that we had underrated the resources of our opponent. We had been led by the experiences of the previous expedition to assume that at the end of May and beginning of June there would be a period of some two weeks of calm weather before the monsoon wrapped the mountain in a blanket of snow. Moreover, we had not fully realized the extent to which even a small deposit of new snow upon the rocks of the final pyramid would render them unclimbable. Our experiences in the nineteen thirties showed all too clearly that such a spell of favourable conditions immediately before the monsoon could not be relied upon. Indeed, it did not occur in any of the three years when attempts were made during that decade. In 1933 we had perhaps a fleeting chance; but both in 1936 and 1938 the monsoon was upon us before we had even established a camp on the North Col.

Even now we cannot assess the chances in any given year of meeting with a sufficiently late—or as we used to think, "normal"—monsoon to ensure favourable conditions for reaching the top. We cannot say from the evidence we have, whether 1924 was an exceptional year, recurring perhaps only once or twice in a generation, or whether in the nineteen thirties we perhaps

encountered a limited cycle of unfavourable seasons. Whatever the answer, it seemed that the problem of reaching the summit of Mount Everest from the north had been reduced to this one vital question. Three times men had climbed to more than 28,000 feet, unaided by oxygen apparatus; we believed that the climbing on the last 1000 feet was no more difficult than that which had already been accomplished, but sufficiently difficult to demand good conditions of weather and snow; given these there seemed to be no reason for failure, without them success would not be attained. Had it been possible, the obvious solution would have been to send out a small party each successive year until the right conditions occurred. There would have been no lack of personnel, and the modest expense would have been amply justified by physiological and other scientific research. Unfortunately permission to do this could not be obtained from the Tibetan Government.

The attempt to climb Mount Everest, once an inspiring adventure, had become little more than a gambler's throw. To overcome this unhappy situation we had begun, as long ago as 1935, to consider the possibility of finding an alternative approach which would present a different kind of problem, one not so completely dependent for success upon the date of the monsoon.

From the mountains above the Kangshung Glacier, to the south-east, we had seen the ridge running up to the summit from the gap (the "South Col") between Everest and Lhotse. This clearly offered a much easier route up the final pyramid than that across the treacherous slabs of the North Face. It was broad and not so steep, while the dip of the strata would favour the climber. But was there any way of reaching the South Col? We had seen that the eastern side was impossible. The western side of the Col was unknown ground.

The Reconnaissance Expedition of 1921 had discovered in broad outline the geography of the south-western side of Mount Everest. The three great peaks of the massif, Everest, Lhotse (South Peak) and Nuptse (West Peak,) together with their high connecting ridges, enclosed a basin which Mallory named the West Cwm. (Mallory had climbed a great deal in North Wales and for that reason he used the Welsh spelling of the word "combe".) Any approach to the South Col must lie up this hidden valley, which enclosed the whole of the southern aspect of Mount Everest.

On the 1935 Reconnaissance Expedition, when with no intention of attempting to climb Everest we had before us a wide field of mountain travel, our programme included an attempt to find a way to the West Cwm from the north. From the Lho La at the head of the Rongbuk Glacier, and also from a high col on the main watershed farther to the west, where we camped for two nights, we had close views of the entrance to the Cwm, a narrow defile flanked on the south by the great north face of Nuptse and on the north by the western shoulder of Everest. Between these lofty portals the glacier of the Cwm poured in a huge ice-fall, a wild cascade of ice blocks, 2000 feet high. The upper part of the Cwm was screened from view by a northerly bend in the valley, so that we could not see either the South Col or the south face of Everest; nor could we find a practicable route down the precipices on the southern side of the watershed which would have enabled us to reach the foot of the ice-fall.

Thus the possibility of finding an alternative route up Mount Everest from the south-west could not be put to the test, for the only way of approaching the mountain from that side was through the valleys of Solu Khombu in Nepal. That country had long been forbidden to Western travellers and there was, in those days, no chance of obtaining permission from the Government of Nepal to send an expedition to that area. Since the war however the Nepalese Government began to relax their policy of rigid exclusion, and from 1947 onwards several mountaineering and scientific expeditions, American, French and British, were permitted to visit various parts of the Nepal Himalaya. In the autumn of 1950, Dr. Charles Houston and his father, together with H. W. Tilman, paid a brief visit to the upper valleys of the Khombu district. Houston and Tilman spent a day exploring the glacier flowing southward from the Lho La, but did not have time to reach the ice-fall.

In May 1951, Michael Ward proposed to the Himalayan Committee—the Joint Committee of the Royal Geographical Society and the Alpine Club which has organized all previous Everest Expeditions—that permission should be sought for a British expedition to go to Everest that autumn. His suggestion was energetically supported by Campbell Secord and W. H. Murray, formal permission was applied for and, on the assumption that it would be forthcoming, Murray began the preliminary work of organizing the expedition. I was in China at the time, and when I arrived home in the middle of June I had no idea of what was afoot; indeed nothing was further from my thoughts than taking part in a Himalayan expedition.

When it was suggested that I should be the leader, I did not at first take the suggestion very seriously for it seemed unlikely that permission for an expedition would be forthcoming. But within a few days it was learnt that, through the courtesy of the Nepalese Government and the good offices of Mr. (now Sir Christopher) Summerhayes, the British Ambassador at Katmandu, permission for the expedition had been granted.

The temptation to accept the Himalayan Committee's invitation was strong. For twenty years, ever since I had first known the Sherpas, I had longed, above all else, to visit their land of Solu Khombu through which the expedition would travel. I had heard so much about it from the Sherpas; for, during our journeys together in other parts of the Himalaya and Central Asia, whenever we came upon a particularly attractive spot, they invariably said "This is just like Solu Khombu," and the comparison always led to a long, nostalgic discourse about their homeland. It required only an intelligent glance at the map and a little imagination to realize that their praise was not exaggerated. We had looked down into the upper valleys of Khombu from the peaks west of Everest. Almost unknown to Western travellers, it had become, to me at least, a kind of Mecca, an ultimate goal in Himalayan exploration.

All that we knew of the South Face of Mount Everest and of the western side of the South Col was that they must be approached up a formidable ice-fall and through a narrow defile which was probably menaced by ice

<sup>&</sup>lt;sup>1</sup> H. W. Tilman, "Explorations in the Nepal Himalayas," Geogr. J. 117 (1951) 263-74.

avalanches from the hanging glaciers on the immense precipices above. Beyond the defile was the unknown Cwm, whose southern containing wall, the 25,000-foot ridge connecting Lhotse with Nuptse, obscured all but the very summit of Everest from the south. We estimated that the floor of the Cwm was about 21,000 feet high, nearly 5000 feet below the crest of the South Col. From the fact that, along the whole range, the mountains were far steeper on the southern side of the watershed than on the northern side, we inferred that the slopes below the col would not be easy. That was all we could guess. It did not present a picture upon which we could build great hopes. But the West Cwm was a freak of mountain architecture and there was no knowing what we might find there. I put the chances against our finding a practicable route at about thirty to one.

Clearly the expedition would only be a reconnaissance, moreover the time and money at our disposal were not sufficient to organize an attempt to climb the mountain. If, despite the long odds, we found a possible route, we naturally hoped to send a further expedition the following spring to attempt it; for we still believed that, despite its many disadvantages, the spring was the only time of year to tackle the mountain. A case had been argued for making the attempt in the late autumn; that is, after the monsoon instead of before it. So far as I know, this idea had not gained the support of anyone who had been high on the mountain, but it had never been put to a practical test. There were conflicting theories about the weather and snow conditions likely to be encountered in the autumn: there was little evidence on which to base these theories and what evidence there was seemed equally conflicting. By visiting the mountain after the monsoon we hoped to furnish answers to some of these questions.

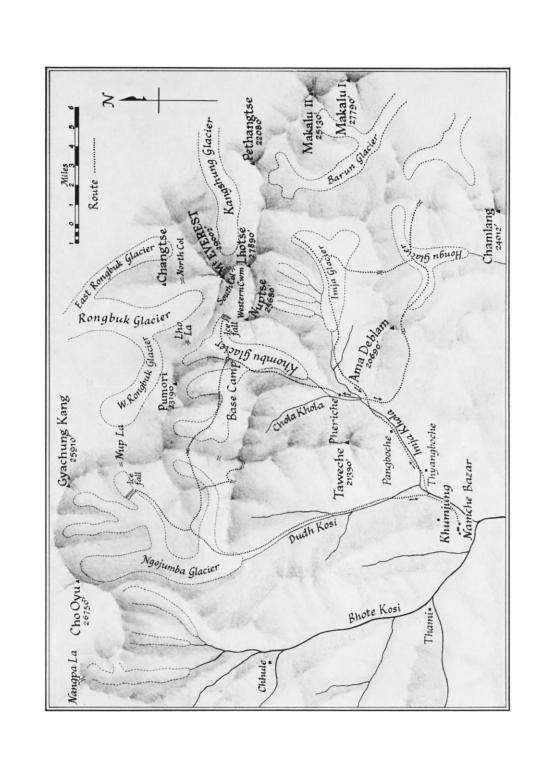
The party originally comprised Bill Murray, Michael Ward, Tom Bourdillon and Alfred Tissières, one of the best known Swiss climbers, who happened to be doing research work in Cambridge at the time. It was also hoped that Campbell Secord would be able to join the party. Unfortunately, in the end, neither Tissières nor Secord was able to accompany the expedition. Murray and Ward sailed from Tilbury on 2 August 1951, taking with them all the stores and equipment. They reached Bombay on August 18. Bourdillon and I flew to Delhi arriving there on August 19. Two days before I left London a cable was received from the President of the New Zealand Alpine Club asking whether two members of the New Zealand Expedition which was climbing in the Garhwal Himalaya that summer, might accompany our party. I also received a request from the Geological Survey of India to attach one of their officers, Dr. Dutt, to the expedition. I welcomed these suggestions.

#### The march

From India there are four ways of reaching Namche Bazar, the principal village in the district of Khombu, where we proposed to make our base. The route from Darjeeling, generally used by the Sherpas, is long and very difficult during the monsoon. The route from Katmandu though easier is also rather long, while the cost in time and money of transporting a large quantity of baggage from India to the Nepalese capital is considerable. By far the quickest



Panorama from the shoulder of Pumori



way would be from Jaynagar, the railhead north of Darbhanga in Bihar. But we were advised that it would be impossible to get from there to the foothills by lorry during the rains, while to march through the hot, swampy country would be most unpleasant. So we decided to travel from Jogbani, another railhead in north Bihar farther to the east. Houston's party had gone by this route the previous year, after the monsoon was over, and they had succeeded in reaching Namche in a fortnight from Jogbani.

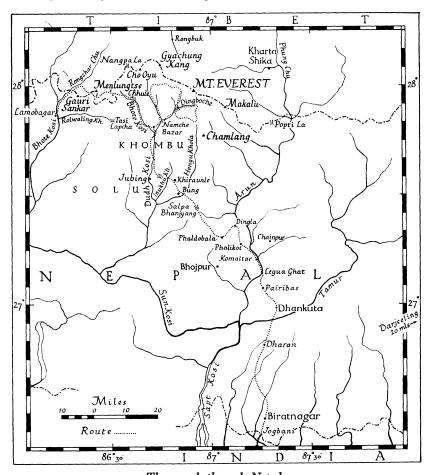
Bourdillon and I reached Jogbani shortly before midnight on August 24 and we were met at the station by a jeep belonging to the Biratnagar Jute Mills. It was raining hard, and judging by the sodden state of the ground all round the little station it seemed that it had been doing so for weeks. The road was so deep in mud that it took an hour to go from the station to the house of Mr. Law, the Chief Engineer of the Jute Mills, less than a mile away. This journey took us across the frontier into Nepalese territory. Mr. and Mrs. Law and Murray and Ward, who had arrived two days before, were waiting for us and we were given a wonderful welcome in this Scottish home. The following day Colonel Proud, First Secretary of the British Embassy at Katmandu, arrived. He had been sent by the Ambassador to assist us and to accompany us as far as Dhankuta. His help was invaluable. He had brought with him Lieutenant Chandra Bahadur, an officer of the Nepalese Army, whose services had kindly been lent to the expedition.

On August 25, too, Angtarkay arrived from Darjeeling. He is a very old friend of mine. We had been together on eight Himalayan expeditions before the war, and I had always regarded him as a man of quite outstanding character and ability. During the past few years he had set up a business in Darjeeling organizing treks in Sikkim for visitors. But he still went with major expeditions, though now as a Sirdar, or foreman. He was on the French expedition to Annapurna in 1950, and climbed to their highest camp. I had asked him to meet us in Jogbani to help with the transport to Namche, and later for work on the mountain. I had not seen him since 1939 when he was just a simple Sherpa porter, though a famous one, drawing the same pay as the others and carrying the same load. Now he had graduated to a different sphere. I was somewhat apprehensive of what I would find: for success tends to spoil these simple people at least as readily as it does the sophisticated. He had cut off the handsome pigtail that he used to wear and his clothes were distressingly smart, but I was relieved to find the same shy reticence and the same quiet humour that I remembered so well. There was no sign of dissipation and he looked no older: indeed he had changed remarkably little in the last twelve years. It was curious that, in spite of his constant contact with Europeans, he had learnt practically no English.

Angtarkay had brought with him from Darjeeling twelve Sherpas including a woman. They were all on their way to Solu Khombu and were hoping to "work their passages" with us. We signed on four of them for the duration of the expedition and agreed to employ the others for the march at the same rates of pay as we gave to the local porters.

The next stage of our journey was a lorry drive of 30 miles to Dharan at the foot of the hills. We were told that with all the rain then falling the road would be impassable, and that we would have to wait until the weather cleared. This was depressing news for there seemed to be no reason why it should ever stop raining. However, Mr. Law assured us that it would. In the meantime we were busy sorting out stores and equipment and packing them into 60-lb. loads for the march.

On the evening of August 26 it stopped raining and on the following morning a watery sun shone through the clouds. We set out in our hired



The march through Nepal

lorry at 2.30 that afternoon. At Biratnagar, two miles away, there was an hour's delay while the driver collected supplies of petrol and tinkered with the engine. The lorry was besieged by people wanting a lift to Dharan and by the time we left it was grossly overloaded. The road was in a deplorable state. Every few hundred yards the vehicle was brought to a standstill in deep mud and each time we had first to dig trenches to free the wheels and then to spread bundles of grass and jute husks over the mud. It took us more than two hours to cover the first six miles. However, though it started to rain

heavily again, conditions improved as we approached the hills. We reached Dharan long after dark, found a billet in an empty house and, after a long search, procured a meal in the bazaar.

The next morning we recruited coolies for the first part of the march. We found that the local practice was to pay coolies so much per seer (2 lb.) per stage. The men therefore preferred to carry 80-lb. loads instead of 60 lb., and we had to set about rearranging all our carefully packed baggage. While we were doing this a small boy came and asked if he could be signed on as "half a coolie." This tickled the Sherpas, and we gave him a box weighing 40 lb. He carried it so well that later I came to regret that all our team of porters were not small boys.

These matters occupied the whole of the morning and it was 2 o'clock in the afternoon before we began the first march. In a couple of miles we reached the foot of the mountains. Here, as elsewhere throughout the length of the Himalayas, they rose abruptly from the plains for about 5000 feet to the crest of the first range of foothills. We walked with our umbrellas up, for the sun was shining at last and it was very hot; but after a couple of hours we had climbed into low hanging clouds where the air was deliciously cool and fresh. We spent the night in a small village just below the crest of the first range. It rained heavily all night, but at dawn on August 29 it had cleared somewhat, and as we crossed the ridge we had a glimpse of the Everest and Makalu massifs, 75 miles to the north shining through a rift in the rain clouds. From the pass we descended 3500 feet to the Tamur River and then climbed a similar height up the other side of the valley to Dhankuta, where we were provided with a tiny rest house in a pleasant wood of tall pine trees. The following morning Colonel Proud started back on his return journey to Jogbani and thence to Katmandu.

Though we had covered a considerable distance, those first two marches had been very easy. The path was wide and well constructed, the porters had gone well and it had not rained at all during the day. So far we had experienced nothing of the exasperation, the dismal toil of travel through the Himalayan foothills at the height of the monsoon. We soon began to suspect that it was not all going to be so easy. We had hoped that we would be able to persuade the Dharan coolies to remain with us, so that we could continue the march the very next day; but they refused and insisted on being paid off. What was worse, we had the very greatest difficulty in finding any fresh recruits. We sent the Sherpas into the bazaar and the Bara Hakim (the local governor) sent peons into the outlying villages to engage men. A few men arrived and agreed to go with us; but finding that we were not ready to start they drifted off again and disappeared. When this happened several times the situation began to seem desperate. By the time we had been in Dhankuta for forty-eight hours we felt as though we would never be on our way again. Various plausible explanations were advanced by the local authorities for the lack of coolies; none of them suggested a solution; a large military camp had been established nearby, and all the coolies were required to work there; owing to the recent disturbances in the country the peasants were frightened to go far from their villages; because of the lateness of the rains, work on the land had fallen into arrears with the result

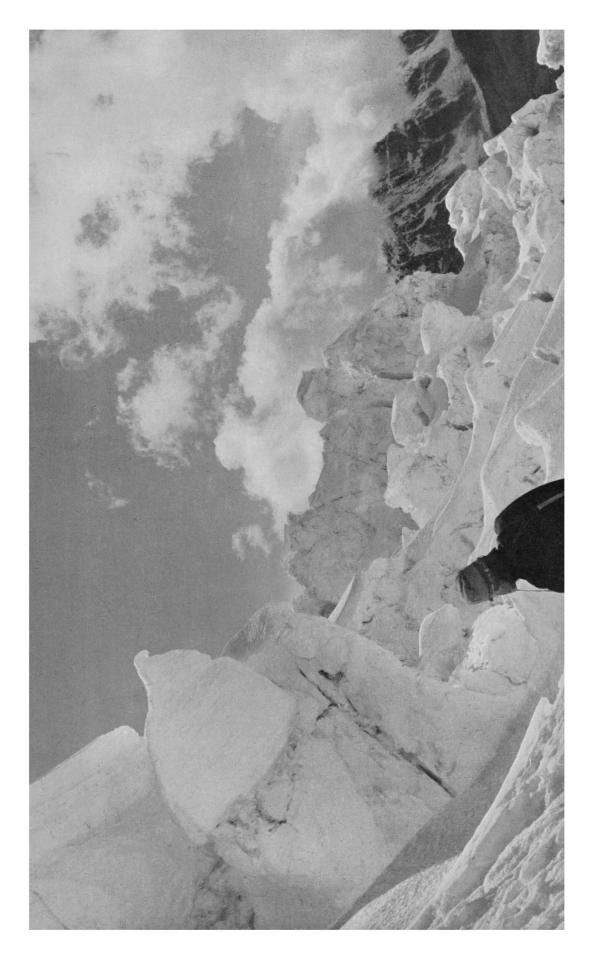
that the demand for labour was unusually heavy; no one ever travelled far during the monsoon if he could help it. Looking back I would say that the last was the most likely explanation. We could get curiously little information about the route ahead, and none that was reliable. We decided that a place called Dingla was to be our next objective. The country beyond that was, locally, a mere legend. Each person we asked held a different opinion as to how we should get to Dingla; while estimates of the time it would take varied between one day and a week.

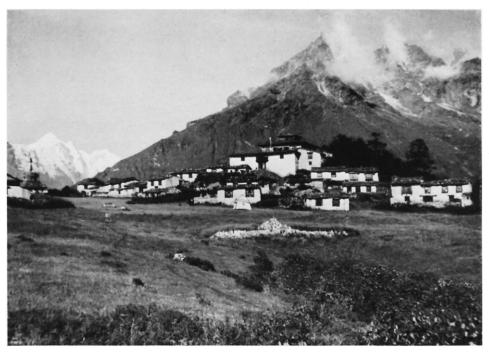
It is remarkable how, when the situation seems hopeless, a solution presents itself. At about noon on September I we suddenly found that there were no fewer than seventeen coolies who were willing, though somewhat half-heartedly, to talk business. We required twenty-five; but Angtarkay urged that we should start at once with these before they had time to change their minds, and that he should follow with the remaining eight when he could get them. I was reluctant to split the party at such an early stage, but it was obviously the wisest course to follow. Furthermore the news that the expedition had moved on would certainly have a quick psychological effect upon the local carriers, who would immediately begin to think that they were missing a good thing.

Before starting we went to say goodbye to the Bara Hakim and to thank him for his help and hospitality. He had just received a message from Jogbani to say that the two New Zealanders who were to join the expedition, E. P. Hillary and H. E. Riddiford, had arrived there. This was good news for until then we had had no word of their whereabouts; we sent messages back to them and started on our way. In the evening we reached a ridge, some 6000 feet high, overlooking the vast basin of the Arun River, where we spent the night in the little village of Pairibas. Angtarkay arrived early the following morning. As we had expected, he had found no difficulty, once we had gone, in recruiting the remaining eight porters. Our march that day took us 5000 feet down to the banks of the Arun.

At dawn on September 3 we walked along a wide shore to a place called Legua Ghat where there is a primitive ferry. A light mist hung low over the great river; this began to disperse as soon as the sun was up and we saw far away up the valley the gleam of snow peaks. The ferry consisted of a tree trunk hollowed out to make a clumsy canoe. It had a crew of three, two paddlers forward and a steersman aft, and could take seven passengers at one time, or an equivalent weight of baggage. As soon as the boat was cast off from the bank it was swept down by the current at an alarming speed. The paddlers worked furiously to get their frail craft across the river with a minimum loss of distance; for after each crossing it had to be towed laboriously back along the shore. The river was about 300 yards wide and though there were no rapids for a mile or so downstream, which allowed a substantial margin of error, the operation required considerable skill. It took from 7 a.m. until 2 p.m. to complete the ten double crossings necessary to transport ourselves, our coolies and our baggage across the river.

We were now less than 1000 feet above sea-level, and when we resumed the march that afternoon the heat was intense. There was no clearly defined route across the vast forested slopes of the valley. We made our way through

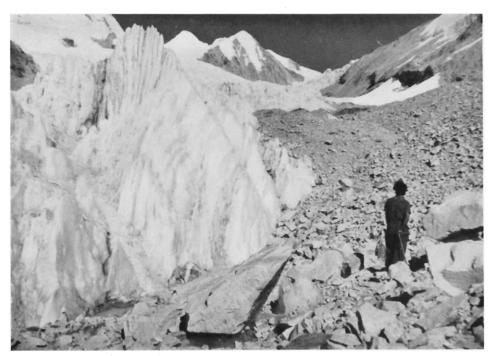




The monastery at Thyangboche



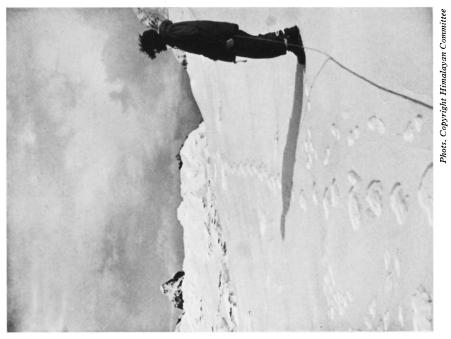
Phots. Copyright Himalayan Committee Standing: Shipton, Murray, Bourdillon, Riddiford; seated: Ward, Hillary



The Nangpa La (19,050 feet)



Stratified glacier ice in the Hongu basin; the peak behind is unnamed





The village of Thami above the Bhote Kosi, peaks of the Kangteke group in the distance

Ward standing beside the line of tracks

steep rocky nullahs along a series of tiny tracks which, branching and intersecting, connect the scattered hamlets. Often the tracks were so obscure that we lost them. The porters, carrying 80-lb. loads, went very slowly; even so their speeds varied a great deal and it was impossible to keep them together and, with such a diversity of tracks, we soon lost contact with some sections of the party. At nightfall on September 3 we reached a hamlet called Komaltar. Though it was only 4<sup>1</sup>2 miles in a direct line from the ferry, it had taken nearly five hours to cover that distance. Nine of the local porters bivouacked in a stream-bed half a mile short of the hamlet and came in early next morning. The rest failed to turn up, and after sending back in search of them without success, we concluded that they had taken a different route. They reached Dingla more than a day after us.

For 7 or 8 miles we kept fairly close to the banks of the Arun, sometimes following a stretch of shore. The tropical forest and the dense undergrowth, the birds, the brilliantly coloured locusts, butterflies and other insects were typical of the deep river valleys of the eastern Himalaya. We wore only shorts and sand-shoes, with umbrellas to protect our heads from the heat. Whenever we came to a safe breakwater, we used to plunge straight in and sit down for a few moments. The water was deliciously cool, though the refreshing effect did not last long. Even the Sherpas who are afraid of water, and who normally never immerse their bodies, began, at first timidly then with great zest, to follow suit: all except poor Lhakpa, the woman, who looked on with obvious envy.

On the afternoon of September 4 we climbed 3000 feet up through lovely country to a cluster of villages called Phalikot, and next day a relatively short march took us to Dingla, a large scattered village perched among woods and terraced fields on a high ridge which commanded sweeping views across the Arun basin and, when the weather was clear, of the great snow ranges to the north.

At Dingla we again had great difficulty in recruiting porters. The Dhankuta men had been engaged as far as Dingla and refused to go any farther. We were delayed for four days. On September 8 Hillary and Riddiford arrived. We now required forty local coolies for, besides the baggage brought by the New Zealanders, we had bought a quantity of rice and flour in case of a possible shortage in the country beyond. At last, on the evening of September 9, after long and exasperating negotiations, enough men had been engaged. We gave them an advance of pay, and they promised to be ready to start soon after dawn the next day. But the next morning it was raining very heavily and they did not come until noon. However, after a couple of hours of tumult and confusion we managed to allot them their loads and get them off.

Our next objective was the Salpa Bhanjyang, a 12,000-foot pass to the north-west leading over from the Arun basin to that of the Hongu Khola. The direct route was impassable owing to some steep mountain streams which were in spate and had swept away the bridges crossing them. This meant that we had to make a long detour to the south-west so as to reach the crest of the high watershed ridge, which we then followed to the pass. The detour cost us several extra days marching. It was particularly annoying

to discover that, if we had known this before, we could have reached the ridge much more quickly by travelling direct to it from Dhankuta via Bhojpur.

On September 10 we made our way along the path leading towards Bhojpur. This was easy and fairly level but we had started so late, and the porters went so slowly, that by nightfall we had only reached the village of Phaldobala 4 miles away. The next morning the porters refused to go on, saying that their loads were too heavy. According to the local custom we had contracted to pay them by weight and for this reason they had in the first place chosen to carry 80 lb. each rather than 60 lb. This meant that we had once again to rearrange all the loads and also to recruit more porters to carry the surplus. These operations, made no easier by the rain, occupied the whole of that day.

On the march to Dingla it had rained mostly at night and the days had been fine. This happy arrangement could not be expected to last and by now it was raining for most of each day. We set off again on the morning of September 12 and climbed to the crest of the high, narrow watershed ridge. For three days we made our way slowly along it in a northerly direction, unable to see anything of our surroundings because of alternating spells of heavy rain and equally drenching Scotch mist. After a while we lost all sense of direction and distance; it was a curious sensation, blindly following this narrow crest, the ground on either hand falling steeply into the silent, forested depths below, while rocky peaks loomed, one after another, ahead. The undergrowth was infested with leeches; on a single twig a score of the creatures could be seen, stiff and erect, like a cluster of little black sticks, ready to attach themselves to our legs and arms and clothing as we brushed past.

The way consisted of a continuous series of long, steep climbs and descents. It was very hard work for the porters for the track was slimy with mud and they slipped constantly, losing their balance under the shifting weight of their sodden loads. We spent the nights in little cowherd's shelters, mostly deserted, which were interspersed along the ridge. They kept out most of the rain, and fires lit inside discouraged the leaches from entering. Without them our lot would have been a great deal worse. One evening at sunset the mists slid down below the ridge, and for a while we saw, across a wide gulf of cloud, the great range of ice peaks.

At the Salpa Bhanjyang, which we reached on the morning of September 15, we joined the route used by the Sherpas travelling between Khombu and Darjeeling. Angtarkay told me that when he was last there, in December 1947, it was so deep in snow that he had taken three days to cross it and that several Sherpas had died attempting to do so. It was a great help at last to have someone in the party who knew the way. From the pass we descended steeply for 7000 feet to the Hongu Khola. At the village of Bung on the farther side of the valley we heard that the bridge across the next big river, the Inukhu Khola, had been washed away, and we had to choose between making a detour of three days to the south, or attempting to build another bridge ourselves. We decided on the latter alternative.

From Bung we crossed another pass, about 10,600 feet high to Khiraunle which stands about 1000 feet above the Inukhu Khola. Here we were told that several villages in the neighbourhood had been smitten by an epidemic of

some virulent disease which killed its victims in four days. From a description of the symptoms it seemed probable that it was bubonic plague. There was a village straight across the valley where fifty people had died during the past fortnight. The intervening gorge was so narrow that, though the place was the best part of a day's march away, we could with the naked eye see people moving about in it. We studied their movements with field glasses and saw that they were engaged in some activity which the Sherpas declared was a burial ceremony.

But the village of Khiraunle also provided some less depressing news. The local people were engaged in building a temporary bridge across the Inukhu Khola to take the place of the one that had been washed away, and this would be ready early the following morning. That day was the worst of the march. Heavy rain fell almost continuously. A way had to be cut through the dense undergrowth to enable the porters to climb down the precipitous slopes of the gorge to the point where the new bridge was built. This was only a few hundred yards downstream from the old bridge, but the intervening distance was impassable along the river bed. The new structure was a very flimsy affair, built in two sections, each spanning a formidable cataract and connecting one bank of the river with a central island. Each section was composed of two slender tree trunks lashed together with green bark, and a bamboo handrail that would not have withstood a pressure of ten pounds. The river was rising rapidly and before everyone was across waves were splashing over the logs. Not long afterwards both sections of the bridge were swept away, leaving the bamboo handrails flapping crazily in the spray.

We then had to climb a steep cliff to regain the track. In doing this we disturbed a hornets' nest. Not having been attacked myself I was mystified by the ensuing confusion and panic until the party had re-assembled on the track, 300 feet above the river. Two of the coolies had been stung so severely (one claimed seven stings) that they were already suffering from acute fever. Several others had swollen faces and eyes, while one man had disappeared. His load was located near the hornets' nest and we thought that he had fallen down the cliff in his attempt to escape. I sent Angtarkay on to a village 2000 feet above to get help, while Bourdillon, Ward and I climbed down the cliffs again and searched along the shore for the missing man, expecting to find his broken corpse. He had not however fallen and eventually he was found in a high fever sheltering in a cave. All the victims of this curious encounter recovered overnight.

The next day, September 19, we crossed another 10,000-foot pass which took us into the valley of the Dudh Kosi. On the evening of September 20 the weather suddenly cleared and the monsoon seemed to have ended. After ten days of perpetual rain and mist the clear air and warm sunlight were delicious. The forest was no longer oppressive but light and green; the waterfalls sparkled as they cascaded down the huge precipices flanking the wide valley, threads of silver hanging from the ice spires 12,000 feet above our heads.

We were now in the country of the Sherpas, and a form of "Channel fever" animated Angtarkay and his companions. At each village through which we passed they were greeted by a crowd of their friends who took them off to some house to be fed and wined to the accompaniment of eager chatter and full-blooded laughter. Of course we came in for our share of this hospitality, which doubtless contributed to the magic of the scene. I began to wonder if, when eventually we reached our objective, any of us would be in a fit state to climb.

The valley split into two narrow gorges. The path, by a remarkable series of log platforms and ladders built in the cliff, followed the right-hand branch for half a mile, the lovely snow peak of Taweche framed between the vertical sides of the canyon, then climbed, zig-zag, for 2000 feet to the intervening ridge. Here, in a little fold in the mountainside, was Namche Bazar 12,200 feet above sea-level. We arrived there in the afternoon of September 22; the journey from Jogbani which we had expected to cover in a fortnight had taken us nearly four weeks.

Namche Bazar, which consists of about sixty houses, is the most important village in the district of Khombu; for it is the last place of any size on the principal route from eastern Nepal to Tibet and is therefore a centre of trade between the two countries. It is the small metropolis of the Sherpas who have close connections, both commercial and religious, with Tibet. They are themselves of Tibetan origin, and are indistinguishable from the people of the great plateau to the north of the main range. They wear the same kind of clothes and have the same religious beliefs and customs, and, though they have a language of their own, they can all speak Tibetan. They lead a semi-nomadic life; each family owns a house and land in several villages at different altitudes, and they move en masse from one village to another according to the seasons, to sow or harvest their fields of potatoes and barley. For this reason it is common to find a village temporarily deserted while the inhabitants are working at another at a different level. They graze their sheep and goats and yaks in the high valleys, often several days' march from their villages.

We were given a great welcome in Namche, where we spent two days sorting out our stores and equipment and arranging for supplies of local food. I met many old friends from former expeditions, most of whom brought flagons of *chang* and stood by urging us to drink.

We were provided with a house. Nearly all Sherpa houses are built on the same pattern. They are oblong, two-storied stone buildings, with carved wooden window frames and lattice windows. The front door leads into a dark stable, through which one has to grope, pushing past the oxen and yaks, to a steep wooden ladder leading to a short, narrow passageway on the upper floor. A right-hand turn at the top of the ladder leads to a latrine, a small dark room, with a hole in the middle of the floor which is otherwise deeply covered with grass or pine needles. The other end of the passage leads to the living room which occupies three-quarters of the upper floor. The alcove between the walled-in ladderway and the front wall is used as a kitchen. The fireplace is set on the floor, and an iron frame is used for holding the cooking pots above the fire. Beyond this is a couch reserved for the women. In the front wall to the right of the fireplace there is a line of windows. Beneath this a platform raised about a foot above the floor is covered with carpets and rugs. Here the men sit, cross-legged behind a low wooden

table. The seat of honour is at the end of the platform nearest the fire. The opposite wall, devoid of windows, is lined with shelves, full of great copper basins, wooden bowls, china cups, bamboo churns and other cooking and eating utensils. The far end of the room is cluttered with bags of grain, ropes, wooden ploughs, mattocks and other farm implements. Beds are made up on the floor as they are required. Some houses belonging to well-to-do people have a room beyond, furnished as a small Buddhist shrine.

#### The ice-fall

We left Namche on September 25, taking with us supplies for seventeen days. In that time we hoped to make a thorough reconnaissance of the great ice-fall, if possible to climb it into the West Cwm, and to see whether or not there was a practicable route from there to the South Col. If we found a route we would then send down for more supplies, carry a camp into the Cwm and climb as far as possible towards the Col. If as we expected there proved to be no practicable route, we would undertake an extensive exploration of the main range, the southern side of which was almost entirely unknown. We had engaged another five Sherpas whom we equipped for work on the mountain, bringing the number up to ten. One of them was Angtarkay's young brother, Angputer, whom I had last met in 1938 when as a lad of fourteen he had come across to Rongbuk from Namche and had carried a load to Camp III (21,000 feet) on Everest. Another fifteen men had been engaged to carry our baggage and supplies to our Base Camp at the head of the Khombu Glacier.

We followed a path across the steep mountainside, 2000 feet above the gorge of the Dudh Kosi, from which we had climbed three days before. On the way we met a very old friend of mine, Sen Tensing, whom I had first met in 1935 when he had come across to Tibet to join the Reconnaissance Expedition. His peculiar appearance in the clothes we gave him had earned him the name of the "Foreign Sportsman." In the years that followed he had been my constant companion in various parts of the Himalaya and Karakoram, and in 1936 I had taken him to Bombay; an adventure which he evidently still regarded as one of the highlights of his career. He had heard news of our approach while herding his yaks in a valley three days' march away, and had hurried down to meet us, bringing gifts of chang, butter and curds. He came along with us, and for the rest of the day he regaled me with memories of the past.

After some miles the path descended into the gorge. We crossed the river by a wooden bridge and climbed steeply through the forest for 2000 feet to the monastery of Thyangboche, built on the crest of an isolated ridge which divided the Dudh Kosi from a large tributary valley known as the Imja Khola. The ridge was shrouded in mist that evening and, as it was growing dark when we reached the monastery, we saw nothing of our surroundings. The monks welcomed us and we found that a large Tibetan tent had been pitched for us on a meadow nearby.

During the past few days we had become familiar with the extraordinary beauty of the country, but this did not lessen the dramatic effect of the scene which confronted us when we awoke next morning. The sky was clear; the grass of the meadow, starred with gentians, had been touched with frost which sparkled in the early sunlight; the meadow was surrounded by quiet woods of fir, tree-juniper, birch and rhododendron, silvered with moss. Though the deciduous trees were still green there were already brilliant splashes of autumn colour in the undergrowth. To the south the forested slopes fell steeply to the Dudh Kosi, the boom of the river now silenced by the profound depth of the gorge. To the north-east, 12 miles away across the valley of the Imja Khola, stood the Nuptse-Lhotse ridge, with the peak of Everest appearing behind. But even this stupendous wall, nowhere less than 25,000 feet throughout its 5-mile length, seemed dwarfed by the slender spires of fluted ice that towered all about us, near and utterly inaccessible.

We stayed in this enchanting spot till noon, and we visited the monastery during the morning. With its cloistered courtyard, its dark rooms smelling of joss sticks and the rancid butter used for prayer lights, its terrifying effigies, its tapestries and its holy books bound between boards, it resembled most Tibetan monasteries in all save its setting. In the centre of the main room or shrine there were two thrones, one for the Abbot of Thyangboche, the other for the Abbot of Rongbuk. At that time the former was away on a visit to his colleague on the northern side of the great mountain, Chomo Lungma (Everest). Hanging in one of the windows of the courtyard, we were amused to find an oxygen cylinder which had evidently been retrieved from the East Rongbuk Glacier by the Sherpas of one of the early Everest Expeditions. It is now used as a gong which is sounded each evening at five o'clock as a signal for all the women who happen to be there to leave the monastery.

From Thyangboche the way led gently downwards through the woods and across the Imja Khola at a point where the river plunges as a waterfall into a deep abyss, overhung by gnarled and twisted trees with long beards of moss waving in the spray. Beyond the village of Pangboche we left the forest behind and entered highland country of heath and coarse grass. We spent the night of September 26 at Pheriche, a grazing village then deserted, and next morning turned up into the Lobujya Khola, the valley which contains the Khombu Glacier. As we climbed into the valley we saw at its head the line of the main watershed. I recognized immediately the peaks and saddles so familiar to us from the Rongbuk side: Pumori, Lingtren, the Lho La, the North Peak and the west shoulder of Everest. It is curious that Angtarkay, who knew these features as well as I did from the other side and had spent many years of his boyhood grazing yaks in this valley, had never recognized them as the same; nor did he do so now until I pointed them out to him. This is a striking example of how little interest Asiatic mountain peasants take in the peaks and ranges around them.

Two days were spent moving slowly up the glacier and getting to know the upper part of the valley. The weather was fine each morning, but each afternoon we had a short, sharp snowstorm. We had some difficulty in finding water along the lateral moraine, but eventually we found a spring in a little sheltered hollow on the west bank of the glacier at the foot of Pumori, and established our base camp there at an altitude of about 18,000 feet. Later we found that the spring was fed from a small lake a few hundred feet above. There was a small heather-like plant growing on the moraine which served

as fuel and supplemented the supplies of juniper that we had brought from below.

On September 30 Riddiford, Ward and Bourdillon, with two Sherpas, Passang and Nima, crossed the glacier to reconnoitre the lower part of the ice-fall. Hillary and I climbed one of the buttresses of Pumori so as to study the ice-fall as a whole and, in particular, to examine the position of the hanging glaciers on either side of the gorge leading into the Cwm and plot the areas of potential danger from ice avalanches falling from these. We reached a height of just over 20,000 feet. It was a wonderful viewpoint. We could see right across the Lho La to the North Peak and the North Col. The whole of the north-west face of Everest was visible, and with our powerful binoculars we could follow every step of the route by which all attempts to climb the mountain had been made. How strange it seemed to be looking at all those well-remembered features from this new angle, and after so long an interval of time and varied experience; the little platform at 25,700 feet where we had spent so many uncomfortable nights, Norton's Camp VI at the head of the north-east spur, the Yellow Band and the grim overhanging cliffs of the Black Band, the Second Step and the Great Couloir—they were all deep in powder snow as when I had last seen them in 1938. Straight across from where we stood, Nuptse looked superb, a gigantic pyramid of terraced ice.

But the most remarkable and unexpected aspect of the view was that we could see right up to the head of the West Cwm, the whole of the west face of Lhotse, the South Col and the slopes leading up to it. Indeed a view from the interior of the Cwm itself could hardly have shown us more. We estimated that the floor of the Cwm at its head was nearly 23,000 feet, about 2000 feet higher than we had expected. From there we could see that there was a perfectly straightforward route up the face of Lhotse to about 25,000 feet, whence it seemed a traverse could be made to the South Col. This long traverse would only be feasible in good snow conditions, and at present conditions were obviously anything but good.

The sudden discovery of a practicable route from the West Cwm to the South Col was most exciting. But we had come here to study the ice-fall and this occupation soon sobered our spirits. The total height of this frozen cataract was about 2000 feet; a rough transverse corridor divided it into two equal sections. The glacier descends from the Cwm in a left-hand spiral, so that the lower section of the ice-fall was facing our viewpoint while the upper half was largely in profile. With the field glasses we picked up two figures on the lower part; from their movements we recognized them, even at that distance, as Riddiford and Passang. Of the others there was no sign. We heard later that they had taken a different route across the lower glacier and had been forced to turn back by a mass of ice pinnacles before reaching the foot of the ice-fall. Riddiford and Passang had made splendid progress, though they were obviously having to work very hard in the soft snow. By 2 o'clock they had reached a point about four-fifths of the way up the lower section. Here they stayed for an hour and then returned.

Such excellent progress by a party of only two at the very first essay was in itself most encouraging. But from where we were standing it looked as though the corridor above them was in danger of being swept throughout its

length by ice avalanches falling from a great line of hanging glaciers on the left-hand wall of the gorge; it looked indeed as though the surface of the corridor was composed entirely of avalanche debris. The right-hand side of the lower ice-fall and of the corridor were clearly menaced from a mass of hanging glaciers in that direction, while our profile view of the upper ice-fall made it look very ugly. There was an easy way round the upper ice-fall to the left, but this was obviously a death trap.

One of the many reasons why an attempt upon a great Himalayan peak offers so very much less chance of success than climbing a mountain of Alpine size is that a great part of the route has to be traversed again and again by parties of laden men carrying supplies to the higher camps. All objective dangers must be judged from this standpoint. The risk, say, of walking for ten minutes under an unstable ice-tower, which might be accepted by a party of two or three unladen mountaineers, is obviously increased a hundred fold in the case of large parties of heavily laden men passing over the same ground dozens of times. The rules of mountaineering must be rigidly observed.

It now seemed that we would be faced with a most difficult decision: to abandon this wonderful new route to the summit of Everest that had appeared like a vision, this chance that we had scarcely dared to hope for, not because the way to it was beyond our powers but because on a small section of the approach the party, and particularly the Sherpas, must repeatedly be exposed to the risk, however slight at each individual exposure, of extermination.

When we met Riddiford in camp that evening he was much more optimistic about the difficulties on the upper part of the ice-fall, but he had not been in a position to judge the avalanche danger. On the following day, October I, while Bourdillon and Angtarkay repeated our visit to the Pumori ridge and climbed to a point some 300 feet higher, Hillary and I made a reconnaissance from another angle. This time we went up to the head of the glacier and climbed again to about 20,000 feet on a ridge of the peak bounding the Lho La on the west. From here, although we could not see into the Cwm, we had a much better view of the upper part of the ice-fall and of the corridor. We saw that, at this time of year at any rate, the avalanches from the left swept rather less than half the length of the corridor, and that a crossing made at about its centre would be reasonably safe. We could also trace a good route through the upper part of the ice-fall.

On October 2, Riddiford, Hillary, Bourdillon and I, with three Sherpas, Passang, Dannu and Utsering, took a light camp up to the foot of the ice-fall with the intention of making a concentrated attempt to climb from there into the West Cwm. At this time Murray and Ward were both still suffering from the effects of altitude and remained at the Base Camp for further acclimatization. The next day the weather was bad; it snowed gently most of the day and we stayed in our tents. The air about us was absolutely calm. At about 10 o'clock we heard a dull roar which sounded like an Underground Railway train. At first we thought it was a distant avalanche somewhere high up in the Cwm. We were quite accustomed to the thunder of these, falling intermittently all around us, from Nuptse, from the great ice cliffs of the Lho La and from the ridges of Pumori. As a rule the noise did not last more than a minute or two at a time. When after a quarter of an hour this distant roar

was still maintained, we began to think that somewhere far away an entire mountainside must be collapsing. After an hour however even this theory seemed hardly tenable, and eventually we came to the conclusion that it must be caused by a mighty wind blowing across the Lho La and over the ridges of Everest and Nuptse. It went on throughout the day. No breeze ruffled the canvas of our tents.

The morning of October 4 was fine and very cold. We started soon after it was light. One of the difficulties of working on the ice-fall, particularly at this time of year, was that the sun reached it so late in the day. At first we were moving over hard ice, but as soon as we reached the icefall we were up to our knees in soft snow. Our feet became very cold, and once during the morning Hillary and Riddiford had to remove their boots, which were designed for their summer expedition and were only large enough for two pairs of socks, and have their feet massaged back to life. With Riddiford's tracks to follow we had no difficulty in finding our way through the maze of crevasses and ice walls. After three and a half hours' steady going we reached his farthest point. Here Bourdillon, who was also still suffering a good deal from the effects of altitude, decided to stop and await our return. The place was just beside a prominent ice-tower which was thereafter known as "Tom's Serac." As the sun was now up, he would be able to keep warm enough.

Indeed our trouble was now exactly the reverse. With the scorching glare of the sun on the fresh snow, and the stagnant air among the ice-cliffs it was rather like working in front of a furnace. This, combined with the altitude, very soon drained our energy and robbed all movement of pleasure. We shed all our upper garments except our shirts, but even so we poured with sweat, and before long our panting produced a tormenting thirst. The going now became far more complicated and laborious. Threading our way through a wild labyrinth of walls, chasms and towers, we could rarely see more than 200 feet ahead. The snow was often hip deep so that, even with so many to share the labour of making the trail, progress from point to point was very slow. The choice of one false line alone cost us an hour of fruitless toil.

But technically the climbing was not difficult, and even if it had been we had plenty of time for the job. By the middle of the afternoon we seemed to be approaching the top of the ice-fall. We had decided to turn back not later than four o'clock in order to reach camp by six, when it would be getting too dark to see. Even that was running it rather fine since it did not allow for such accidents as the breaking of a snow bridge; and to become involved in such a complication after dark would be to run considerable risk of frostbite.

From the last line of seracs we looked across a deep trough to a level crest of ice marking the point where the glacier of the Cwm took its first plunge into the ice-fall, like the smooth wave above a waterfall. The trough was really a wide crevasse, partly choked by huge ice blocks, some of which appeared none too stable. Crossing it was the most delicate operation we had encountered.

By 3.50 we reached the final slope beyond the trough, less than 100 feet below the crest, from which we expected to have a clear view along the gently sloping glacier of the Cwm. We had to climb this diagonally to the right so as to avoid a vertical brow of ice directly above. Passang, whose turn it was, took the lead; Riddiford followed and I came next. When we were on the slope it became obvious that the snow was most unstable and must be treated with great caution. By this time Passang had advanced about 60 feet. Suddenly the surface began to slide downwards, breaking into blocks as it went. Passang, who was at the upper edge of the break, managed with great skill to dive over it and ram his ice axe into the snow above. I was only a few yards from Hillary who had a firm anchorage on an ice block at the beginning of the slope and I was able without much difficulty to scramble off the moving slope back to him. Riddiford went down with the slope, and was left suspended between Passang and me, while the avalanche slid silently into the trough. It was a nasty little incident which might with less luck have had rather unpleasant consequences.

It was now high time to retreat. Going down was of course almost effortless compared with the labour of coming up. We had the deep trail to follow and we could jump or glissade down the innumerable little cliffs, each of which had cost a great deal of time and hard work to climb. It was after 5.30 when we reached Bourdillon who had had a longer wait than he had bargained for, and was by now getting both cold and anxious. Soon after we had started down, the ice-fall became enveloped in mist. Later, this broke behind us and we saw, high above the darkening Cwm, the north face of Nuptse, a golden tracery of ice lit by the setting sun. We reached camp as it was getting dark, very tired after a strenuous day.

We were well satisfied with this reconnaissance. It was rather disappointing at the last moment to be denied a view into the Cwm, from the top of the ice-fall, though in fact it would not have shown us much more than we had seen already. But we had climbed practically the whole of the ice-fall in a single day despite abominable snow conditions and the fact that over by far the largest and most difficult part we had been working our way across entirely new ground. In time the route could certainly be greatly improved, and the climb would then be done in half the time and with less than half the effort. We thought that the snow conditions would probably improve; but even if they did not, the final slope could certainly be climbed and safe-guarded by suspending lifelines from above. Finally, at this time of year at least, the route seemed to be reasonably free from the menace of ice avalanches. We had little doubt that with a few days' work we could construct a safe packing route up the ice-fall into the West Cwm.

We decided however to wait for a fortnight before attempting to do this. There were three seasons for this decision. The first was to allow time for snow conditions on the ice-fall to improve. Secondly, we had seen that there was still an enormous amount of monsoon snow lying on the upper slopes of Lhotse and Everest which would make it impossible to climb far towards the South Col, to say nothing of the possible risk of large snow avalanches falling into the Cwm from above. While we knew that at altitudes of 25,000 feet and above this snow would not consolidate, we had reason to believe that by the beginning of November a great deal of it would have been removed by the north-westerly winds which were already becoming established. Finally, half the party were badly in need of acclimatization before they could undertake

any serious work, even in the ice-fall. We spent the fortnight making journeys into the unexplored country to the west and south.

On October 19 Hillary and I, who had been working together during this fortnight, returned to the Base Camp on the Khombu Glacier. We had expected the others to get back on the same day, but they did not arrive until nearly a week later. On October 20 and 21 we took a camp to the old site at the foot of the ice-fall. This time we brought with us a large twelve-man double-skinned dome tent designed for the Arctic. It was well worth the labour required to level a sufficiently large area of the ice surface on which to pitch it for, after the tiny mountain tents we had been using hitherto, it was positively luxurious and, having more room, we found it a great deal easier to get off to a really early start in the morning. On October 22 we started work on the ice-fall. Snow conditions had improved slightly, but a number of new crevasses had opened up across our former route and these caused us a little trouble to negotiate. However, by the end of the first day's work we had made a solid and completely safe route up as far as "Tom's Serac." Near this we marked out a site for a light camp from which to work on the upper part of the ice-fall, but we decided that for the present we would continue to work from our comfortable camp below.

Next day we started early, taking with us Angtarkay and Utsering. It was a glorious morning. With every step of the way prepared, we climbed without effort, breathing no faster than on a country walk at home, and reached "Tom's Serac" in one hour and twenty minutes. We paused there for a brief rest that we hardly needed, while the sun climbed above the great Nuptse-Lhotse ridge to quicken the frozen world about us. We were in a mood of exultant confidence, for we expected that very day to enter the great Cwm.

But immediately above the serac we ran into difficulties. A broad crevasse had opened across our former route and it took us an hour and a half, and a lot of very hard work, to find a way across it. This check, though a salutary warning against over-confidence, was not serious, and it was not until we were over the crevasse that the real trouble began. Here, about 100 yards from the serac, we found that a tremendous change had taken place. Over a wide area the cliffs and towers that had been there before had been shattered as though by an earthquake, and now lay in a tumbled ruin. This had evidently been caused by a sudden movement of the main mass of the glacier which had occurred some time during the last fortnight. It was impossible to avoid the sober reflection that if we had persisted with the establishment of a line of communication through the ice-fall and if a party had happened to be in the area at the time, it was doubtful whether any of them would have survived. Moreover the same thing might happen on other parts of the ice-fall.

With regard to our immediate problem however, we hoped that the collapse of the ice had left the new surface with a solid foundation, though it was so broken and alarming in appearance. Very gingerly, prodding with our ice-axes at every step and with 100 feet of rope between each man, we ventured across the shattered area. The whole thing felt very unsound but it was difficult to tell whether the instability was localized around the place one was treading or whether it applied to the area as a whole. Hillary

was ahead chopping his way through the ice blocks when one of these, a small one, fell into a void below. There was a prolonged roar and the surface on which we stood began to shudder violently. I thought it was about to collapse, and the Sherpas, somewhat irrationally perhaps, flung themselves to the ground. In spite of this alarming experience it was not so much the shattered area that worried us as the part beyond, where the cliffs and seracs were riven by innumerable new cracks which seemed to threaten a further collapse. We retreated to the sound ice below and attempted to find a less dangerous route. Any extensive movement to the left would have brought us under fire from the hanging glaciers in that direction. We explored the ground to the right, but here we found that the area of devastation was far more extensive. It was overhung moreover by a line of extremely unstable seracs.

We returned to camp in a very different frame of mind from the joyous mood in which we had climbed the lower part of the ice-fall only a few hours before. It seemed obvious that although it might be a permissible risk for a party of unladen mountaineers, working on long ropes and taking every available precaution, to attempt the ice-fall (and even this was doubtful) we would not be justified in trying to climb it with a party of laden porters whose movements are always difficult to control. It looked as though, after all, we were to be faced with the decision which we had dreaded three or four weeks before; to abandon the attempt to reach the Cwm, not because the way was difficult but because of a danger which by the very nature of its underlying causes was impossible to assess with any certainty. This does not however mean the total abandonment of the route; for the condition of ice-falls is subject to considerable seasonal variation, and it is not unreasonable to expect much better conditions in the spring than in the autumn. Nevertheless it was a bitter disappointment not to be able to proceed with our plan of carrying a camp through into the Cwm and making a close examination of the route to the South Col. We agreed to defer the final decision until we had made another reconnaissance of the ice-fall with the whole party.

The following day we again climbed the ridge near the Lho La. The view was not very encouraging for we could see no way of avoiding the shattered area, which was in fact a belt stretching right across the glacier, though the upper part of the ice-fall above the corridor so far as we could see was undisturbed. On October 26 the rest of the party arrived back at the Base Camp and next day we all climbed the ridge of Pumori from which Hillary and I had first looked into the West Cwm on September 30. We saw that a certain amount of monsoon snow had been removed by the north-west wind from the peak of Everest, though the north face of the mountain was still in an unclimbable condition. There was no obvious change in the snow conditions inside the Cwm, on Lhotse, or on the South Col.

That evening we reoccupied the camp below the ice-fall and on October 28 all six of us, together with Angtarkay, Passang and Nima, set out for the ice-fall once more. Our chief object was that the others should examine the situation for themselves so that we could come to a united decision; though Hillary and I, too, were anxious to have another look at it. We arrived at the shattered area by the time the sun had reached us. Only minor changes had

taken place in the past five days, and this encouraged us, with great care, to cross it and make our way over the delicately poised seracs beyond. Passang and Angtarkay made no secret of their apprehension, and constantly pointed out to me that it was no place to take laden men. Beyond the corridor we found that the upper ice-fall was in a fairly stable condition, only one serac having collapsed across our former route. By ten o'clock we reached the final wall dominating the ice-fall. The steep slopes below this were in the same dangerous condition as they had been at the beginning of the month; but a fin of ice had become detached from the wall and, while other routes were being explored, Bourdillon succeeded in cutting steps up this which enabled us to reach the top of the wall. This was a fine effort for it involved his cutting his way through a deep layer of unstable snow into the ice beneath. By keeping to the edge of the fin he was able to avoid any risk of a snow avalanche, but as the whole thing overhung a profound chasm into which it might collapse it was as well to avoid having more than one man on it at a time.

We now stood above the ice-fall, on the lip of the West Cwm, and we could look up the gently sloping glacier, between the vast walls of Everest and Nuptse, to its head. But we soon found that we had by no means overcome all the difficulties of entry into this curious sanctuary. A little way farther on, a vast crevasse split the glacier from side to side, and there were indications of others equally formidable beyond. To cross these in their present state would have taken many days of hard work and a good deal of ingenuity, and unless we could carry a camp up to this point we were not in a position to tackle them. I have little doubt that in the spring they would be a great deal easier. We sat for nearly an hour contemplating the white, silent amphitheatre and the magnificent view back across the Khombu Glacier to Pumori, Lingtren and the peaks beyond the Lho La. Then we returned down the ice-fall.

The fact that we had now climbed the ice-fall without mishap made the decision to abandon the attempt to carry supplies through into the Cwm all the more difficult. We discussed it at great length. The next day Ward and Bourdillon climbed the ridge near the Lho La to satisfy themselves that there was no alternative route, while Hillary and I paid one more visit to the ice-fall. Angtarkay and Passang were still convinced that it would be madness in the present conditions to try to carry loads through it, and unfair to ask the Sherpas to do so. There was nothing for it but to submit, hoping that we would get another chance in the spring.

#### Exploratory journeys

Our failure to make a safe route up the ice-fall, and so to bring camps and supplies through into the West Cwm, disappointing though it was, had one great consolation, for it allowed us more time than we might otherwise have had to explore some of the great areas of unknown country along the southern side of the main range. During the period between our two visits to the ice-fall we divided into two parties. Murray, Riddiford, Bourdillon and Ward made their way westward from the Base Camp, up a long tributary glacier which took them past Pumori and along the southern side of the watershed. Apart

from the exploration of the area, their chief object was to find a pass across the range to the north, which the Sherpas had told us about. We assumed that it must lead over to the West Rongbuk glacier and it was hoped that the party might be able to climb Pumori from there. I was particularly interested in this alleged pass in view of our failure in 1935 to find any route across this part of the range. They found however that no such pass existed.

From the head of the tributary glacier they crossed a col which led them into the upper basin of the Dudh Kosi at the head of which they found themselves in a mighty cirque formed by the two great mountains of Cho Oyu (26,867 feet)<sup>1</sup> and Gyachung Kang (25,910 feet). On the eastern flank of this cirque was the Nup La which had been reached by Hazard from the Tibetan side in 1924. For two days they climbed towards this col up an ice-fall, a good deal more difficult than the West Cwm ice-fall though much less dangerous, before they finally gave up their attempt to reach the watershed. Then they descended the Ngojumba Glacier and the Dudh Kosi valley to Namche.

Meanwhile Hillary and I explored the country to the south of Mount Everest. Our chief objective was to find a way through the tangle of ranges to the Kangshung glacier which flows from the eastern flanks of Everest, and so to link up with the explorations of the 1921 Reconnaissance Expedition. In this project we were stimulated by the Sherpas' statement that at the head of the Imja Khola there was a pass leading over to Kharta in Tibet. We took with us a young man called Ang Dorje who knew that valley well and who was most insistent that the pass existed. The upper basin of the Imja is contained on the north by the Nuptse-Lhotse wall and on the east and south by dozens of unnamed peaks between 20,000 and 24,000 feet high. When we reached its head we saw at once that there was no practicable way across the mountain to the east. Ang Dorje was not in the least abashed, and merely said that he had supposed that we, as mountaineers, would find a way. Turning southwards however we succeeded with some difficulty in crossing a col about 20,000 feet high over into the basin of the Hongu Khola, where we camped on the shores of a big lake. We looked across a wide basin to the peaks of the Chamlang massif. We were now well beyond the country known to the Sherpas. We found evidence that the Hindu Nepalis from the south penetrated with their flocks to these lofty valleys.

We crossed the Hongu basin to the eastward and found a pass (about 20,300 feet) leading over to the great Barun glacier flowing south-eastwards at the foot of Makalu (27,790 feet). From here, if we had had another three days' food with us, we could undoubtedly have reached the Kangshung. Another tantalizing project that presented itself, if only we had had the time and resources to undertake it, was to descend the Barun and to plunge into the great unexplored gorges leading down to the Arun River. But once embarked upon this game of mountain exploration in these remote ranges there is no end to its fascinating possibilities.

All this time the weather was fine and the period spanned the full moon. The nights were very cold. The mornings were sparkling clear; each afternoon cloud welled up out of the valleys and wrapped the peaks, each evening at sunset it dissolved. It was then, in camp, that we saw this stupendous

<sup>&</sup>lt;sup>1</sup> Earlier editions of the Survey of India map give the height as 26,750 feet.

country at its best, for each peak in turn was framed in shifting mist, its golden tracery of ice glowing in deep relief; no longer a mere part of a mountain massif but floating in sublime isolation. Before the cloud had quite vanished, the moon would climb above some lofty crest, and presently all the peaks were there again, frozen against the night sky.

Returning across the Hongu basin we crossed a third pass, also about 20,000 feet, on its western rim just to the south of the beautiful peaks of Ama Deblam which, as we had hoped, took us back into the valley of the Imja Khola. Finally we crossed a high ridge running southward from Nuptse and so back to our Base Camp on the Khombu Glacier.

Our third field of activity was the Gauri Sankar range which we set out to explore at the beginning of November after work on the ice-fall had been abandoned. We went north-west from Namche along the valley of the Bhote Kosi. At Thami, Hillary, Riddiford and the geologist Dutt, who during October had been carrying out extensive geological investigations over a wide area, turned up a valley to the west and crossed the Tasi Lapcha. This pass though involving some difficult ice climbing was known to, and occasionally used by, the Sherpas. It led through a mass of spectacular granite peaks over a northerly offshoot of the main range into a most remarkable gorge known as the Rolwaling, running westward under the southern precipices of Gauri Sankar. The rest of us continued along the Bhote Kosi to the little grazing village of Chhule. From here Murray and Bourdillon, taking four days' food with them, went on to visit the Nangpa La, the pass by which the trade route crosses from Solu Khombu to Tibet. It is approached on either side of the watershed up a long glacier and is situated in an extensive icefield at an altitude of more than 19,000 feet. It is, so far as I know, the highest pass on any trade route in the world. It carries a considerable volume of traffic throughout most of the year, and deep grooves worn in the glacier ice bear witness to the passage of countless yaks. No ponies are taken across; not because it is too high, for ponies are used extensively in the Karakoram Pass which is not much lower, but because of a curious superstition that if anyone attempts to take a pony across not only will the pony die but the owner will also perish. It is by way of the Nangpa La that the Sherpas have their intimate contact with Tibet; large numbers of them cross it each year not only to trade, but to make a pilgrimage to the Rongbuk Monastery. From near the pass, Murray and Bourdillon saw a possible way of climbing Cho Oyu.

From Chhule, Ward and I made our way westward into a group of high mountains whose position in relation to the main range was difficult to determine. After some time spent in reconnaissance we found what seemed to be the only way through them, over a col which we subsequently named the Menlung La. Travelling very light and taking enough food for a week, we crossed this col together with Sen Tensing. It led over to a large glacier system, the main ice-stream of which was flowing southward; which suggested that we were still on the southern side of the main range. However when we came to explore our new surroundings we found that we were in a vast amphitheatre, in many respects very like the Nanda Devi basin, in the centre of which, completely isolated from the main massif, stood a

most lovely peak of pale granite. It was the highest peak of the range, being somewhat higher than Gauri Sankar. We named it "Menlungtse." We found that the waters of the basin drained to the north-west and plunged directly into a system of tremendous canyons the main artery of which we identified as the Rongshar. It is one of those remarkable rivers which, like the Arun, rise far to the north on the Tibetan plateau and have cut their way clean through the great Himalayan range. It is certainly one of the most spectacular gorges I have seen. We also succeeded in reaching the crest of the main range south of Menlungtse at a point about 19,500 feet high. From here we looked straight down 7000 feet into the Rolwaling. Sen Tensing told me that this name was a Sherpa word meaning the furrow made by a plough. We were surprised to find that there was a way down the huge precipices into the gorge.

It was on one of the glaciers of the Menlung basin, at a height of about 10,000 feet, that, late one afternoon, we came across those curious footprints in the snow which have caused some public interest in this country. We did not follow them farther than was convenient, a mile or so, for we were carrying heavy loads at the time, and besides we had reached a particularly interesting stage in the exploration of the basin. I have in the past found many sets of these curious tracks and have tried to follow them but have always lost them on the moraine or rocks at the side of the glacier. These particular tracks seemed to be very fresh, probably not more than twenty-four hours old. When Murray and Bourdillon followed us a few days later the tracks had been almost obliterated. Sen Tensing, who had no doubt whatever that the creatures (for there had been at least two) that had made the tracks were Yetis or wild men, told me that two years before he and a number of other Sherpas had seen one of them at a distance of about 25 yards at Thyangboche. He described it as half man and half beast, standing about 5 feet 6 inches, with a tall pointed head, its body covered with reddish brown hair but with a hairless face. When we reached Katmandu at the end of November, I had him cross-examined in Nepali (I conversed with him in Hindustani). He left no doubt as to his sincerity. Whatever it was that he had seen he was convinced that it was neither a bear nor a monkey, with both of which animals he was of course very familiar. Of the various theories that have been advanced to account for these tracks, the only one which is in any way plausible is that they were made by a langur monkey, and even this is very far from convincing, as I believe those who have suggested it would be the first to admit.

These various exploratory journeys gave us an intimate knowledge of a stretch of 60 miles of the Great Himalaya Range, in a country hitherto practically unknown to western travellers. This form of mountaineering, the exploration of unknown peaks, glaciers and valleys, the finding and crossing of new passes to connect one area with another, is the most fascinating occupation I know. The variety of experience, the constantly changing scene, the gradual unfolding of the geography of the range are deeply satisfying, for they yield a very real understanding, almost a sense of personal possession, of the country explored.

(The text of the above paper is taken from 'Everest reconnaissance 1951, by Eric Shipton; to be published by Messrs. Hodder and Stoughton Ltd.

in the autumn of 1952, with over sixty plates. It is, of course, a fuller account of the Expedition than was contained in the spoken address given by Mr. Shipton at the Evening Meeting of 4 February 1952 which resulted in the following discussion.—Ed. G.J.)

#### DISCUSSION

#### Evening Meeting, 4 February 1952

Before the paper the PRESIDENT (Mr. J. M. WORDIE) said: The speaker tonight is Mr. Eric Shipton who has made no less than ten expeditions to the Himalaya, of which five have been to Mount Everest. There is probably no one else in this country so well qualified to speak about Everest as is our lecturer this evening.

#### Mr. Eric Shipton then read his paper

Professor G. I. FINCH: I am not going to attempt to add anything to the most interesting discourse which Mr. Shipton has given us. I ask you to look with me a little into the future, with a view to helping Shipton and his friends to climb Everest by the South Col, which we all sincerely hope they will attempt in 1953.

I am convinced from the photographs I have seen and, above all, by Mr. Shipton's clear, sober description and careful balancing up of potentialities of the route and all its objective dangers, that he has found in the West Cwm a practicable route to the summit. I am also convinced that most if not all of the upper part, above say 24,000 or 25,000 feet, is probably more suitable for an assault on a mountain of the height of Everest than the route which we have known hitherto, leading up the North Col and the north side of the mountain.

But there is one very large measure of help which I should like to see offered to Shipton and his party. What is wanted is some way of converting the ascent of the great ice-fall from a pack route (which it will have to be if they are going to carry all their own equipment up into the great basin of the West Cwm) into a climber's route—a climber's route whereby they will not have to carry or pack anything up through that broken ice-fall but will merely have to climb it under what I might call ordinary Alpine climbing conditions. The party should be supplied with all the stores they need by means of air drops into the basin of the West Cwm. It's a matter of expense. But if you do not incur that expense you are risking men's lives in continually moving up and down and packing heavy weights; and having therefore to move slowly up through that ice-fall to the West Cwm.

The South Col is obviously a practicable proposition, with a reasonable measure of objective risk. I am not saying there is no risk; there is a risk in the ice-fall, but it is a reasonable measure of objective danger which a responsible party can undertake provided they are lightly loaded and able to move fast. The risk entailed in the packing of heavy loads over the ice-fall, by necessarily slow-moving porters, is altogether another matter and should not be incurred. I therefore hope that Shipton's party will be provided with a reliable air-lift for stores into the great basin above the ice-fall.

The PRESIDENT: We all wish Mr. Shipton every success, not only in the attempt he is to make this year on Cho Oyu, but in the greater venture which will be made in the year following. It is hoped that the Nepalese Government, which gave permission for the reconnaissance in 1951, will be willing also to give permission for the bigger party in 1953.