THE HIMALAYAN SCHOOLHOUSE EXPEDITIONS

By J. G. WILSON

(*Four illustrations: nos. 63–66*)

THERE are no words for it. The view from the saddle above Khumjung can bring tears to the eyes of seasoned Himalayan veterans; to a newcomer, it is scarcely believable. The haze of our alcoholic passage through the sin-hole of Namche was washed away as with a cold plunge, and left only grateful awe.

It was a clear, cold afternoon in late March, 1963, and, as the towering circle of peaks deluged the senses, I thought an already full day had reached its climax. In fact, the best was yet to come. We threaded our way down the track through the rhododendron till Ed. Hillary, with justifiable pride, pointed dramatically down to the little arm of the Khumjung valley which runs in towards the saddle. There, between us and the village, and looking far less out of place than I had secretly feared, was the aluminium building which represented the reason for our being there; Khumjung school, the first permanently operating general school for Sherpa children in the Khumbu.

Down below, backed by what seemed like the whole village population, the product of the first two years' schooling waited to welcome Ed. back. Even in external appearance, the product was impressive—clean without being excessively scrubbed, and tidy without losing their appealing individuality of garb. But the real proof of the school's worth came with the demonstration they put on for us in front of the building; and, even more, as we watched their daily schooling in succeeding days. The eagerness to learn, the astounding level reached in two years, and the disciplined yet informal atmosphere contrasted with my memories of reluctant primary school days to the overwhelming advantage of the Khumjung school.

We were led through their shouts of 'Welcome, welcome' to the schoolhouse. Here, we had our backs put against the wall of the school, our mouths opened, and more liquor forced into us. This is a custom the pleasantness of which varies with the quality of the proffered chang or rakshi. Lesser lights can pretend to sip and pass the cup on undiminished; but each and every villager is zealously alert to see that the 'Burra Sahib' partakes of their offering, and how Ed. retains even a shred of sobriety at these gatherings, I do not know.

The building is quite a large aluminium prefabricated structure, with two rooms, well lighted by windows along the front. Its erection,

though, was not without its moments. Faced with the problem of providing a school building there at short notice, Ed. successfully approached Indian Aluminium Co. for the donation of one of their pre-fabs. I have it on the best authority that the problem with pre-fabricated buildings is that each part has a set place in the structure, into which it must be fitted in a set order. Barring an inside knowledge of what this order is, the amateur re-fabricator of a prefabricated building is advised to have a set of plans showing what piece, what place, and what order. And apparently it helps to have the set for the structure one is erecting, not the set for some other building. Unfortunately, the donating company in this case, with that mixture of impulsive generosity and well-intentioned error which gives the Indian scene its distinctive flavour, supplied one building and the plans for another. However, trial and error, and the ingenuity particularly of Wally Romanes, rose to the occasion. Now two years old, the building had sustained slight damage from an exceptionally heavy snowfall, but was otherwise in fine shape.

The building, and the school it houses, were the outcome of a question Ed. put to some of the senior Sherpas of his 1960–61 Himalayan Scientific and Mountaineering Expedition, one cold snow-shrouded evening beside the Tolam Bau glacier. 'Tell us, Urkien, if there were one thing we could do for your village, what should it be?' The answer was unequivocal: 'We would like our children to go to school . . .'[1] Few answers can have had so rapid a translation into reality. Before the end of the expedition, Ed. had arranged the donation of the building, and a group of expedition members, in six hectic days, had fought their false plans to a standstill and erected the school.

The building is an external only, of course; crucial is the teacher who staffs it. In recruiting Tem Dorje, a Sherpa from Darjeeling with long teaching experience, Ed. made the choice which ensured success for this school and for the fuller programme which followed it. Tem Dorje is a man born to teach. Rotund and jovial, he rules his children with firm kindness, and they respond with an affectionate obedience which it is a joy to see. As important to the wider programme is his ability to get the best out of teachers under him. And as for his own teaching ability, the two-year product we had already seen in action was full testimony. Many of the children could already read and write both in Nepali and English (both foreign languages to them, of course), and do arithmetic with an assurance which I, for one, envied.

With a wisdom which one could wish more evident in many large aid projects, Ed. had been careful not to import an alien curriculum and teaching method, ideal in some absolute sense, but unrelated and useless

[1] Sir Edmund Hillary, *Schoolhouse in the Clouds*, Doubleday, New York, 1964, pp. 1–2.

to the practical realities of the Khumbu situation. The curriculum is the normal Nepalese Government school curriculum, and the basic medium of instruction is Nepali. And, though by good management we have a teacher there at present who is several cuts above the normal Nepalese Government teacher, still the basic teaching method and the grading into classes is identical with that prevailing in the rest of Nepal, and a Government teacher could easily take over. Now it is true that the teaching method, for example, is a little old-fashioned, and can tend to rely too much on learning by rote. But beside the advantages of having the school a part of a wider existing system, so that if we had to pull out the school could easily go on (and so that the ultimate plan of the Government taking over anyway is made possible), any disadvantages are negligible.

There could be no doubt that the people of the Khumbu, at least, were satisfied with the resulting system. Following the establishment of the school, Ed. had received numerous requests from the surrounding villages, urging that schools be provided for them also. It was really from these requests, and from the reports of how worth while the Khumjung school was proving, that the first Himalayan Schoolhouse Expedition, now being welcomed to Khumjung, was born. With money largely raised through the American firm which had financed his 1960–61 expedition (World Book Encyclopedia), Ed. had gathered a team together to build two more schools, one at Pangboche and one at Thami; and also to provide Khumjung with a water supply.

When the reception was finally over, our hangovers eased, and a base camp at Khumjung established, we set to work on this fairly full programme. First on the list was the water supply. Khumjung and its twin village of Kunde are situated in what appears to be an old moraine trough. Presumably because of the porous moraine base, the water position is so impossibly bad one wonders how the villages have survived. In a day's strenuous exploration and questioning, we found that Kunde had a small seep-hole near the village, and other seep-holes and a tiny spring high up the hill above. Khumjung's nearest water, three slowly seeping wells, was 350 ft. above the highest houses of the village, and her supply when these wells dried up completely, each summer, was an erratic stream a further 300 ft. up. To this supply came the women of the village with huge wooden containers, and from it they staggered back down the three-quarters of a mile of steep, rough track, with 85 lb. of wood and water supported by their head-band. We quickly revised our estimate of what it means to be a 'tough cookie', and set about remedying the situation as best we could.

In two weeks' work on the hillsides above the villages, we achieved some moderate success. We dug back into the tiny Kunde spring, at considerable risk to life and limb from huge flying boulders—the cause

of the flying being either dislodgement by us from above, or disposal from below by Pemba Tarke and Phu Dorje, whose incredible vigour and strength were unfortunately not matched by their accuracy in throwing. Increased flow to thrice the initial quantity, which we attained, sounds impressive; but initial quantity being only a gallon every three minutes, the result was not overwhelming. However, we decided to pipe it down to Kunde as better than nothing, once more pipe was brought in.

At Khumjung, we soon discovered we had no alternative to piping down the rather unreliable snow-melt stream from high above the village. Experiments with various intake positions were cut short by the approach of the pre-potato planting festival to Khumbila, and by a shrewd public relations decision to get the first water down, temporarily at least, on the day of the festival. Feverish activity followed, as unruly alkathene pipe was unrolled and laid. Then, behold—forth from the flanks of Khumbila gushed a mighty six gallons a minute flow, a bare fifty yards from the village.

The village reaction was tumultuous and immediate, one old headman breaking down and weeping with joy. The festival degenerated somewhat that night, into a party in our honour; but faithful Mingma, our Sirdar and a gentleman to the core, kept a watchful eye on things, and guided his sahibs home before they got too bad.

Our dismay can be imagined when, early next morning we found our secret fears realised; the great god frost had temporarily defeated Khumbila's water-giving power, and the women were again trudging mournfully, and with a reproachful look we thought, up past the silent pipe. Sun, and a few broken connections fixed, soon restored the flow, and our mana, and during the next two months the supply was improved and finalised.

While some of us had thus happily returned to childhood, playing at water dams and mud pies, others had been spying out the land preparatory to commencing building operations. Our shift to Pangboche, the site of the first new school, filled us with anticipation in more ways than one. Here, building was to be combined with climbing on Taweche. It was never quite clear whether Taweche had been selected as a climbing objective because it towered directly above Pangboche, where a school was to be built; or whether Pangboche had been selected for a school because it nestled at the foot of Taweche. But it was clear that the combination was an ideal one. Builders could turn themselves into climbers in a single day's scramble to Taweche base camp; while on one memorable occasion, the entire climbing team somewhat reluctantly transformed themselves into builders by means of a three-hour dash right from Camp 1 to the school site.

The aluminium prefabricated building at Khumjung was an essential

of the successful rush establishment of the school there. But it was never intended as a pattern for schools in this area. It suffers from drawbacks of expense, difficulty of transport, and unfamiliarity to the Sherpas who have to maintain it. For the extension of the programme, Ed. planned to use local materials and local building methods as far as possible, both to save transport of materials, and to ensure a building easily maintained by the local community. Thus the walls of the new schools would be of normal Sherpa construction, unmortared rock walls twenty inches or so thick. The timber would be cut from the local forests, and the wooden parts of the school would be Sherpa style wherever possible. The two big problems with Sherpa buildings, so far as schools are concerned, are light, and the preservation of the roof. The normal Sherpa house, with small, unglassed windows shuttered in bad weather, is too dark for a school building; and we had brought in glass to provide large weatherproof windows. Some enterprising Sherpas already had glass in their windows, and were familiar with its use and maintenance. The wooden shingles of the typical Sherpa roof, sound for years while a constant fire smokes and dries them from below, would rot in a year or so in a fireless school-building, which for four months of the year would not even be occupied. To get around this problem, Ed. had decided on corrugated aluminium roofing, with fibre glass panels further to enhance the lighting. Indian Aluminium again came to the rescue, donating and packing both aluminium and fibre glass sheets. The details of rafter and purlin spacing, and of correct nailing, of this type of roof would not be familiar to the Sherpas; but their craftsmen have ingenuity and improvisation as basic talents, and we were sure maintenance and repair would be no trouble to them.

Building and mountaineering alternated for a while, and neither seemed to be making much progress. It was fascinating, though, to watch the stonemasons' sure hands erecting the firm mortarless walls; and to joy in the artistry of an age-old craft as the pit-sawing crew turned huge forest logs into various sizes of building timber. And there came the time when things suddenly went ahead with a rush, with sahibs all over the building, putting the roof on crooked, the floor in unevenly and the windows askew, but doing a fine job, of course. Murray Ellis, the expert amongst us, had his patience strained at times by his willing but unskilled helpers, sahib and Sherpa alike, but proved equal to the task of creating order out of chaos. The school eventually opened was in truth a very handsome stone and wood building, with its aluminium roof jarring much less than one might imagine.

The opening ceremony gave us yet another glimpse into ritualistic Sherpa-land—a side of their life not exactly formal, but nonetheless impressive for all that. The Head Lama of Thyangboche monastery presided; while Taweche leaned over to watch, and Everest smiled



Photo: Himalayan Schoolhouse Expedition, 1964]

THE NEW SCHOOL AT NAMCHE BAZAR WITH THE SUMMIT OF THAMSERKU (21,730 FT.) BEHIND.

(No. 63)



Photo: Himalayan Schoolhouse Expedition, 1964]

THE LUKLA AIRFIELD—1,100 FT. LONG AND AT AN ALTITUDE OF 9,500 FT.
THE AIRFIELD IS AT AN ANGLE OF ONE IN TEN.

(No. 64)

benignly from up the valley, till the inevitable afternoon snowfall hid us from their view. Chang and food and children and dogs circulated freely round the crowded building, while speeches were made, and blessings received from the Head Lama. Songs from the Khumjung school children, up here to show off their skills to their as yet uneducated country cousins, rounded off the afternoon.

To staff the new schools, and to expand the staff of the old, Ed. had recruited three more Darjeeling Sherpa teachers, and had for two years been paying for the education, in Kathmandu, of a bright young Khumjung boy, now to be an assistant teacher. These four had come in with us, and, while building was in operation, had been briefed by Tem Dorje, now head-teacher for all the schools. The teacher for Pangboche, Phutenzi, was so keen to get going that well before the building was complete he had started classes in a house in the village. Now, he moved in with his equally eager pupils, and we happily left them to the task of completing the simple wooden desks which were to be the initial furniture of the school.

While Pangboche school and Taweche had been claiming the attention of the majority of the party, work was also in hand at Thami. When the now 'experienced' building team moved to this village, the walls were already up, and our part in proceedings could commence. The site at Thami is admirable. It is not as spectacular as Pangboche's little perch on a ridge. But, set in the midst of a broad, gently sloping area of common grazing ground, it has the advantage of ample playing space. And the views, up towards Tibet, round the peaks leading up to the Tesi Lapcha, and down valley to where Thamserku and Kangtega float remote above the valley cloud, are as beautiful as can be desired.

The building here is larger than Pangboche school—outside measurements of 40 ft. by 20 ft., as against Pangboche's 27 ft. by 20 ft. But we knew more tricks, and had it up in about half the time. Even more than at Pangboche, though, we were troubled by the great difficulty of getting wood—Thami being so far above the nearest big timber—and by the fact that what we did get was often either warped or warping, and was completely unseasoned. Frequently, there would be a race to get a crucial bit of timber into position and nailed fast before it warped beyond repair. But Murray triumphed again. Admittedly, the floor, put in by our Sherpas with the left-overs of timber, had cracks large enough to drop small pupils through, while some of the rafters were dismayingly thin or knotted. But it was competing against no city building regulations, and Murray thought it would probably stand a year or two. Desmond Doig, our linguist and artist, and his Sherpa helpers, threw themselves into the painting of the wooden front, and soon Buddhist designs and symbols flamboyantly kept the eye from straying to the odd knot-hole or bend.

While all this was going on, Desmond, whose other role in the expedition was that of supplier (and not infrequently embroiderer) of local information, regaled us with blood-curdling stories of the extent of communist infiltration from Tibet in the Khumbu in general, and in Thami in particular. At one stage, he assured us, when he was alone with the school during the preliminary work, there had been an attempted communist take-over of the school. I was never quite sure what did happen at the time in question, but certainly a most undesirable local character, who had brushed with Ed. on a previous occasion, and who everyone agreed was the chief communist in the area, had tried to put as many obstacles in the way of the building as he could. Now Ed. and Des., whose work is undoubtedly, as a side effect, making a Chinese take-over of the Khumbu more difficult, have long been regarded by the Chinese as imperialist spies, indeed, the radio communications of the 1960–61 expedition were repeatedly jammed by a Tibetan station. Consequently, Des. was not at all easy about living, an easy prey, so close to the Chinese check post across the Nangpa La. This uneasiness communicated itself to us; and we often went to bed to dream uneasily of being woken by an abrupt Chinese command, or an even more abrupt Chinese bayonet in the stomach.

But no such incident occurred, the local trouble was overcome, and the school officially opened, again by the Head Lama of Thyangboche. The eager interest and participation of the Head Lama in our plans was and is a great tribute both to Ed. and to the Head Lama, and is quite crucial to the success of the project. There could, of course, have been considerable friction between the monasteries and the new schools. The schools are an encroachment on the sole authority of the gompas in matters educational, even though the subjects taught in no way coincide (lamaistic education, in which many non-lama Sherpas are literate, is religious in nature and Tibetan in language). Moreover, the presence of others in the area educated in subjects in which lamas are not versed is a possible threat to their general authority, and to the respect in which they are held. In some cases we could sense opposition from the local gompas, especially at Pangboche. But the Head Lama is a most energetic and forward-looking person, who has a lively interest in the total welfare of his community, not just in their religious welfare narrowly conceived. 'The Khumbu is a very bad place', he once told me, over my protests. 'The people cannot read and write, and therefore are dirty and ill-clad, and do not get the best out of the land.' Any attempt to rectify this state of affairs is assured of his enthusiastic support in advance. It has been made even more sure for our programme by the warm personal friendship existing between Ed. and the Head Lama, and the way in which Ed. has been careful to inform and consult the Head Lama about his plans, and to encourage the full participation

of the schools in the religious life of the community. All this was symbolised, in a very graphic way, by the Head Lama officially opening and blessing each of the schools, in conjunction with the local lamas.

Throughout this whole period, our two doctors, Phil Houghton and Mike Gill, had been treating the sick while acting as builders and climbers at the same time. Now, with the onset of the monsoon and the departure of the major part of the expedition, they set up a full-time clinic in Khumjung. For the three months of the monsoon they operated this clinic, not only bringing relief to many then sick, but also gathering information against the time when another of Ed.'s dreams, a hospital at Khumjung, could be realised.

That year, we left Tem Dorje in charge of three schools, the very promising beginnings of an educational system for the Khumbu. So promising, in fact, that even as we sloshed out to Kathmandu in the monsoon, Ed. was evolving plans for extending the programme still further. He was also receiving fresh petitions for schools from nearly every village we passed through, as an additional spur. What he eventually came up with was rather staggering in its scope. The school project was to be enlarged by no less than 100 per cent—new schools to be built at Juntesi, away over in the Solu, and at Chaunrikharka and Namche. Then the old problem of access to Namche from the Dudh Kosi valley—at the time via a very steep track—was to be attacked by way of two bridges, one of considerable length. Finally, the ultimate aim of a hospital at Khumjung was to be brought one step closer by the construction of a small airstrip at Chaunrikharka, from which the hospital could be serviced and staffed conveniently. The 1964 Himalayan Schoolhouse Expedition was on the move. Oh, and what about another crack at Taweche, or an attempt on Thamserku, Ed. wanted to know in one letter. It should help prevent us from becoming idle and bored, I thought in reply.

We did have several advantages over 1963. Ed. knew a lot more about what was needed, and how long things would take, in the school line. He planned to bring a bigger construction team, who could be scattered about the various rather dispersed projects, if necessary. And, with my wife and myself living in India, a cheap preparatory expedition could be run in the pre-monsoon. All the same, I confess to secret fears that the programme would prove too big for us, though I was happy with the thought that it was better to plan too much and not quite finish it, than to end up with less done than could have been.

The pre-monsoon trip went off very well. Ann and I were accompanied at various times by Bernie Gunn (N.Z.) and by Jim Fisher (American Peace Corps, Kathmandu); but the thing was held together and made successful by Mingma, the expedition Sirdar. We got the stone walls up and the timber cut and pit-sawn to size at all three school

sites, though at times the inevitable delays of the Khumbu and continuous bad weather made the schedule pretty tight. In addition, a better airstrip site than the one Ed. had in mind was found, not by us, but by the men of Lukla village. Deciding that a strip in the town would be good for trade, they neatly pinched the project from their neighbour, Chaunrikharka, by showing us a site much more level, with less crop land involved; and by assuring us that the wind always blew up the strip, never across. Baffled by their science, we signed up; and were most relieved when, in due course, their predictions about the wind were proved correct, and Ed. approved the change. We could do little for the bridges bar felling forty odd trees, debarking them (a messy business—we were coated with pine gum for weeks afterwards), and leaving them to dry. But we did decide Thamserku was the better bet over a second attempt on Taweche, by the shortest of odds, and worked out a most improbable route up this rather improbable peak.

The main expedition was post-monsoon, and boasted a genuine carpenter (even if he had later turned travel agent) and, again, an engineer (even if his degree was in agriculture—this I never quite fathomed, but he put up a good enough bluff over surveying the airstrip to fool me, at least). Plus, of course, the usual amateur bangers and whangers, under such guises as mountaineers, expedition doctors, linguists, leaders and Sherpas. Experience definitely helps, as did the advance construction of the walls and preparation of the timber, and the schools were put up very quickly and even quite neatly, all things considered; though the team was tiring a little by the third. Apart from using more rock in the front walls, the 1964 models were basically similar to those of 1963. Lest anyone accuse us of importing the uniformity of mass production to the Khumbu, however, we made each school different in detail, and great was the later discussion over which was the most beautiful of them all. With someone in the trade to teach us, we were soon all masters at the O.K. carpentering phrase, the most essential gambit being the timely yell 'nail it at that' at crucial moments. We worked, I would imagine, to a strict tolerance of several inches.

At Junbesi, the matter of the aluminium roof, eyesore or beauty, reached critical proportions, and I was finally shot down in flames by Mingma. The villagers of Junbesi donated a fine barley field right in the centre of the very picturesque village. Back in the pre-monsoon, Ann and I, while seeing the great advantages of the central and reasonably flat site, were wincing at the thought of the shining metal roof smack in the middle of the rock and shingle roofs which fit the landscape so well, and right beneath the lovely triangle of Numbur. Then, and also during the construction post-monsoon, I voiced these fears to Mingma, and to some of the headmen. They were at first amused and incredulous, but as he realised how serious we were, Mingma took me

to task. 'These "quaint" roofs of ours', he said in effect, 'that you like so much; they leak, they are dark, and they require a lot of upkeep. To us, knowing all this, they do not look so beautiful. Whereas the metal roof of the school is 100 per cent weatherproof, has panels to let the light in, and lasts without maintenance for many years. What do you mean when you say that despite all this it looks ugly?' Mingma is one of those people who do not waste words, but he convinces when he uses them; and I finally decided it was a particularly pernicious form of western arrogance and selfishness on my part to see the matter the way I did.

The pattern of agreement under which Ed. constructed the schools was simple but effective. The villagers had to donate the site and the trees for timber, and to provide all the unskilled labour free (clearing the site, digging foundations, carrying rock and wood). The expedition paid the skilled labour (stonemasons, carpenters, pit-sawing crews), and supplied exotic material (roofing, glass, nails, etc.). We did have trouble at times keeping the villagers to their part of the bargain; sometimes because crops or yaks needed attention, sometimes through sheer laziness, and sometimes through lack of effective leadership from the headmen. But the threat of calling off the school altogether always eventually brought the most reluctant around, for their eagerness for the school was deep and genuine, even if at times the specific demands on their time irked them. And often, particularly at Junbesi in the pre-monsoon, village participation was hearty and prompt. In addition to these building commitments, the villagers involved in the 1964 schools had to provide their teacher with a house and with firewood—an arrangement often needing prolonged and terribly involved negotiations, but one which usually worked out eventually to everyone's satisfaction. The balance between involving the villagers in this sort of thing, to make them value and feel responsible for the school and the teacher, and not laying on a very hard-working community so many extra burdens that they wish they had never asked for a school, is a delicate one. There will always be room for differences of opinion over the details; but I feel that we are at least fairly close to a correct balance for the communities concerned.

The airstrip was completed more successfully and faster than anyone but the ever optimistic and hard-driving Mingma dared hope. I personally could not see how the patches of scrub and potato fields and grazing land, divided into terraces separated by steps up to four feet high, and with an over-all slope of one in nine and some tricky sideways declivities, could ever see the safe landing of the most agile plane. But if there were doubts in the minds of Ed. or of Don Mackay, airstrip engineer, they were kept secret; while Mingma and Annullu, construction foremen par excellence, clearly knew the successful outcome was a

foregone conclusion. Up to two hundred 'men' (in fact, men, women and children) at a time were unleashed on the unfortunate land, tearing out the scrub, cutting here, filling there, unearthing and dragging away huge boulders yonder. Don at times was heard muttering about two quick swipes with a 'dozer; but even he had to admit that the human-motivated miracle going on before our eyes was impressively rapid. In something like twenty days, a strip about 1,200 ft. long by 100 ft. wide, with only the mildest of curves in its profile, and with a surface beaten by repeated Sherpa dancing, was waiting for a plane to use it. Well ahead of schedule, a Pilatus Porter flew in for the initial landing, bringing civil aviation officials from Kathmandu, who could do no other than approve the strip. We proceeded to use the strip extensively for expedition purposes, eventually flying all members out to Kathmandu. But its real significance lies in what it makes possible in the future; closer supervision of the now six-school education programme, and, more vital still, the quick access which, though perhaps not absolutely essential, is so tremendously useful to the establishment, maintenance and staffing of a hospital.

There remained the bridges; after a tussle with Thamserku which Don Mackay has reviewed elsewhere in these pages.[2] The bridges were really the thorniest problem of all, or rather one of them was. The Sherpas themselves are expert bridge builders, cantilevering logs out from either bank, then bridging with a central span. But the length of such a bridge is severely limited, and the stretch of the Dudh Kosi we wanted to bridge, just below the junction with the Bhote Kosi, was beyond this limit. In the dry winter period, up till a few years ago, the Sherpas used to put a tiny temporary bridge across this point, from boulder to boulder, and across the Bhote Kosi beyond, to connect up with an easily graded track to Namche; but, following the collapse of one such bridge and the death of all seven people on it at the time, they had abandoned this practice. The alternative route lay up over a steep bluff to an easily bridgeable place on the Dudh Kosi above the junction, then up a very steep cliff, with a poorly graded track above that again; a considerable effort for the carriers of heavy loads continually travelling along this important trade route, to say nothing of weak-chested sahibs. Ed. hoped to make the easier route permanently usable by a very cunning ploy, which I gather was his own idea. To make it possible to have a longer span while still using the basic Sherpa structure (as against the highly effective but very expensive full swing-bridge), he planned to support the centre span of the bridge with light wire rope.

It remained a difficult task nonetheless, and at one stage we were on the verge of calling it off. Ed., Don and I inspected the spot one cold day when the roaring expanse of the river looked particularly horrifying

[2] *A.J.* 70. 90–95.

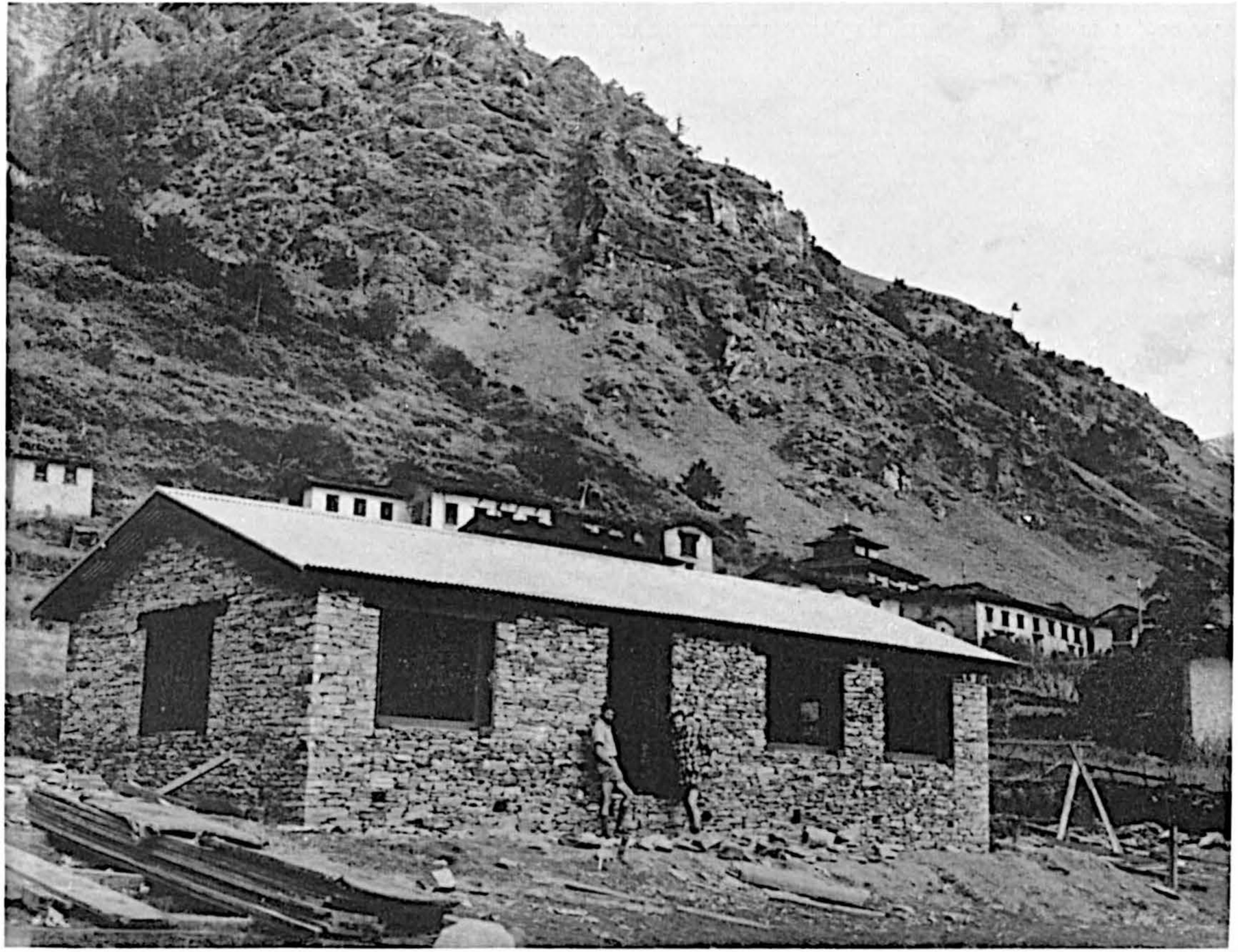


Photo: Himalayan Schoolhouse Expedition, 1964]

THE NEW SCHOOL AT JUNBESI WHICH IS ALREADY OVERCROWDED WITH AN AVERAGE OF NINETY PUPILS PER DAY.

(No. 65)

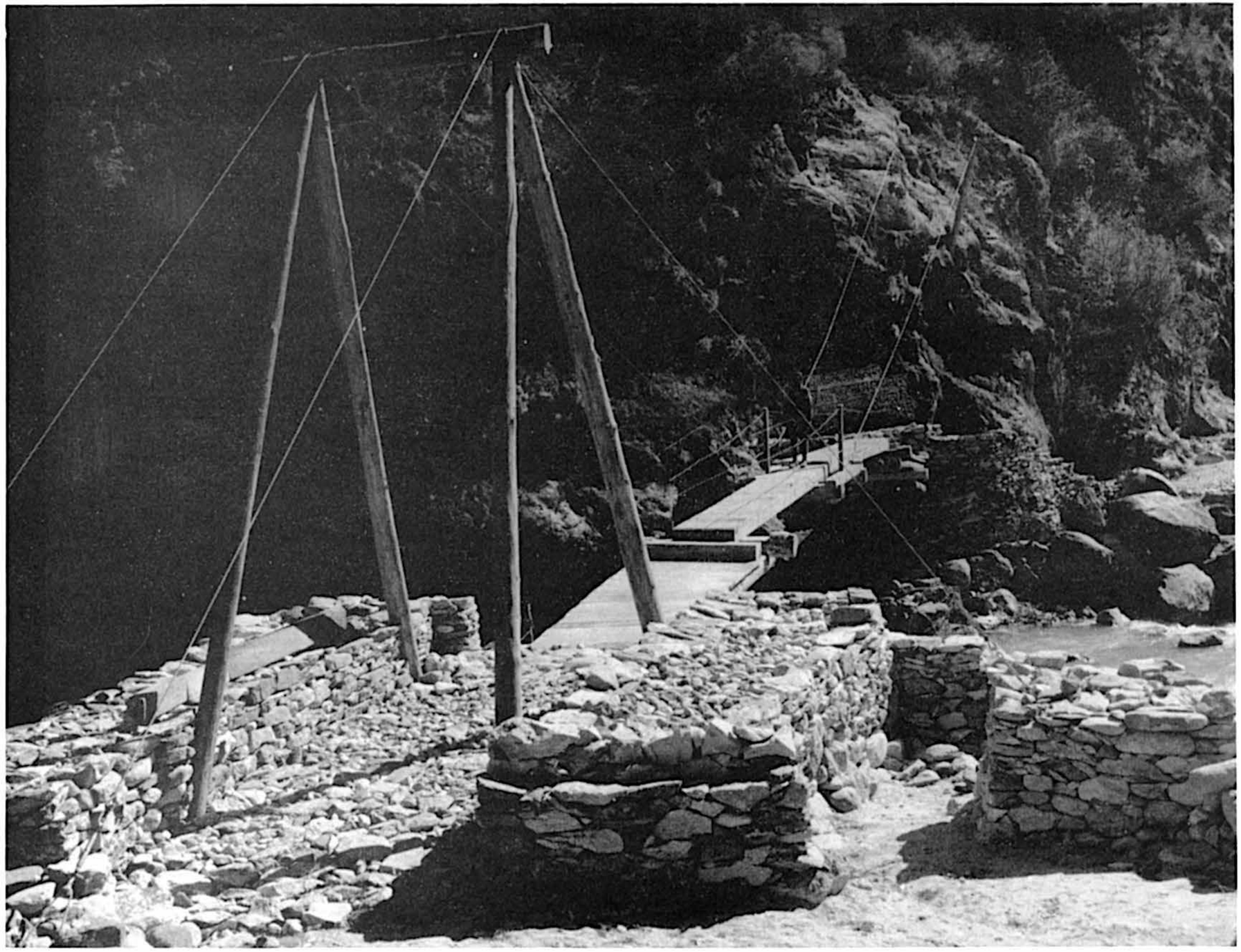


Photo: Himalayan Schoolhouse Expedition, 1964]

THE 95 FT. BRIDGE OVER THE DUDH KOSI RIVER BUILT BY THE EXPEDITION. IT IS AT AN ALTITUDE OF 10,000 FT.

(No. 66)

and large. After several attempts, we threw a stone with a string attached across to the far bank, and measured the distance as 95 ft.—a good 20 ft. longer than the largest Sherpa bridge we had been able to find. Despite excellent progress on the schools and airstrip, we still had Namche school to build, a mountain to climb, and some finishing work at Chaunrikharka and on the airstrip. And already October was well advanced. What finally decides at times like this? A rational weighing of all known factors of time, skill and material?—these were too evenly balanced to be of help. To my mind it was much more the irritation of the idea of admitting defeat which at this crucial point edged the bridge project over the hump. In any case, the decision was onwards, and work began.

The central figures were Ed. and Don, endlessly arguing about this or that sahib-type detail, and never trusting the other to do the thing correctly; and Mingma and Annullu, ferociously driving the working force of about sixty (including a master bridge-builder), who dragged the logs to the site, erected the massive stone work at either end, and edged out the double cantilevers, each layer five trees strong. Huge boulders were crashed down from high on the cliff above the true left bank side of the bridge to deflect the worst of the monsoon flow from the wire-netting and stone groins which protected the cantilever foundations. Then out of the endless discussions between Ed. and Don, with late-comer engineer Brian Hearfield adding dry snippets of information about tensile strength and static load, there emerged the central structure. Two wire ropes were slung from improvised spikes in the cliff (converted crowbars) on the left-hand bank, across to a large A-frame on the right, and down to dead-men buried beneath several tons of rock. On these was slung a wooden cradle, a strong square frame. Then out from each cantilever a 28 ft. span was edged to bridge the gaps to the swinging cradle. This was a stirring moment, for the river was then actually bridged; and after that only mopping-up operations, the planking and a hand-rail, remained. The final structure has, of course, still to pass its first monsoon test; but our spirit of optimism was shared, backed by a sounder knowledge of the river and its moods, by all the Sherpas.

The other bridge, across the Bhote Kosi, was purely Annullu's affair. The span required was much smaller, well within the reach of the normal Sherpa bridge. Annullu and his men were much more capable than we at that. The only untoward incident was when a log got away on him as he and his gang were lowering it down a cliff above the bridge site; a massive timber about 40 ft. long, before Annullu's appalled gaze it crashed down right onto the half-finished cantilever far below, on which six men were working. Three of the men were thrown off the cantilever, but backwards onto the bank; the other three were untouched. The cantilever was wrecked, but beside the escape of the six

this was of no importance. Annullu has unshakeable faith in the infallible 'luck' of the Burra Sahib ('can't he put just a bit of it down to skill or hard work on my part', grumbles Ed.), and this new incident was added to his long list of stories proving this luck.

Actually, the whole bridge operation was proof to Annullu. One night he regaled Don Mackay with full and gory details of all the bridge construction in the valley for the last twenty years or so. In all, Don discovered, eighteen people had died in this work, an average of over one per bridge. And here Burra Sahib had built two bridges, and no men were dead!

Two bridges, three schools, an airstrip, maintenance on the older schools and on the water supplies, and a mountain; the whole programme had been completed with time left over for flag-showing visits to Pangboche and Thami, a holiday at Thyangboche for the great religious festival of Mani Rimdu, and some impressive opening ceremonies. Of these latter, the highlight was undoubtedly the day when the Crown Prince of Nepal set the seal of royal approval on Ed.'s work, by flying in to open the airstrip and the Chaunrikharka school. What with His Highness and his court, three ambassadors, the Head Lama, and the Burra Hakim (district magistrate) all there, it was a great day. Though His Highness returned to Kathmandu the same day, the ambassadors stayed and were treated to (and I think enjoyed) one of the wildest N.Z. parties Lukla had yet seen (diplomatic grog in no way hindering this performance).

But the visit of the Crown Prince did more, to our minds, than compliment Ed.'s work. It made a great stride towards fuller emotional integration of Sherpa-land with Nepal, which the schools, with their Nepalese curriculum, had already greatly boosted. Sherpas from all parts of the Solu and the Khumbu came to see the Prince; and there was no question whatever but that they were mightily impressed by His Highness. The Prince is a very purposeful and personable young man, and he spoke to the large crowd with just the right mixture of easy companionship and authority. Perhaps we exaggerate the effect. But it seems to us that with the school children singing the Nepali anthem each day, and learning the Nepalese curriculum and, with it, more about Nepal as a whole; and with the adults now convinced visually that the Kathmandu Government knows they exist, and can speak in the attractive tones of a striking young man who takes the trouble to come out to open a school for them; the Solu Khumbu is at last part of Nepal in spirit as well as in letter.

I am no lover of the doctrine that all communism is bad for all countries; nor do I think the Nepalese Government is a paragon of efficiency or fairness. But I do think that the Sherpa community is one which least needs the often effective, but often forced and brutal,

development communism can bring. It is already a society of hard-working people getting the maximum out of a harsh environment, with a striking measure of community co-operation and harmony. And it has, in addition, or perhaps as a cause, a deep religious base, rich in serenity and strength, lacking in excesses of dogmatism or harmful superstition, which I, for one, would weep to see destroyed.

But will the schools themselves destroy it, even while they help keep the Khumbu, with its Tibetan cultural heritage, free from communist Tibet? Will increasing knowledge of the rest of the world bring increasing dissatisfaction with the hardness of their own lot? We do not know. But we are sure that secular education will come and must come to the area, and can bring benefits as it comes. And we know that it is eagerly desired by the Sherpas themselves. How much better, then, if it comes slowly and sanely. Ed.'s programme is concentrating first on the essentials of reading, writing and arithmetic, with their possibilities for agricultural and social and medical training and improvement. It is providing these by means of Sherpa teachers who are at home in the culture, and already very much a part of their new communities. Given this approach, the solid harmony and values of Sherpa life should provide a sufficiently strong safeguard against the possibilities of evil that form the shadow behind the blessing of education.

The programme continues. The current task is roofing and staffing the Head Lama's school at Thyangboche. Keen that his lamas extend their education to include the new subjects taught at Ed.'s schools, he has used money donated by the wife of the late Indian ambassador to Nepal (who died in the area last spring) to construct the shell of a very fine building. Unfortunately, the money was not sufficient to provide a metal roof, which the whole of the Khumbu knows is the essential mark of a school. There was, moreover, the problem of getting a good teacher. Taking the opportunity of Ed.'s presence at Mani Rimdu, the Head Lama delicately suggested that this would be an admirable gift to the gompa. So the planes that flew us out from Lukla, flew in roofing iron and glass from Kathmandu, and a party will go in this spring to put the iron on. By that time, also, Ed. hopes to have found a good teacher to carry out the Head Lama's wishes that his lamas might learn Nepali and English and keep abreast of the times.

Then, sometime, there is that hospital to be built and staffed.