
Geographical Work in India for This Society

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GEOGRAPHICAL WORK IN INDIA FOR THIS SOCIETY

Lieut.-Colonel Sir Francis Younghusband, K.C.S.I., K.C.I.E.

Read at the Meeting of the Society, 9 March 1917.

THE curiosity to know something of what is beyond their own immediate neighbourhood is a characteristic of most men—certainly of most Englishmen. If there is a range of hills in the distance they want to go and find out what it is like; and when they have come up to the hills they want to get to the top and see what is on the other side. The thirst for knowledge of the Earth's surface is the foundation of all geographical science. Geography is fundamentally a knowledge of the natural features of the globe. But the more we know about them the more we find there is to know; and the keener becomes our pursuit of geographical knowledge, the more exact and detailed knowledge do we require. We want to know this Earth in every part—even the remotest—even the north and south poles, the summits of the highest mountains, or the heart of the sternest desert. We want to know whether the country is flat or hilly, desert or covered with vegetation, thickly or sparsely inhabited, and the climate, whether it is hot or cold, dry or wet. Then as we come into detail we want to know the precise height of the hills or mountains, the length and breadth and depth of the rivers, the extent of the desert and forest and cultivation, the passability of the mountains, rivers, deserts, and forests, the disposition and character of the inhabitants, and the limits of the territory occupied by groups of people. Moreover, we seek not only exact knowledge of the natural features of the Earth and of whatever moves upon it, but of the relation of the different items of knowledge to one another—as for instance the effect of a high range of mountains upon the rainfall of countries which lie beyond it and of the rainfall upon the mountains. And we want to get all the various branches of our knowledge co-ordinated into a whole so as to show how the various features of the Earth's surface act upon the mobile elements—the atmosphere, the waters, and plant, animal, and human life. Especially, and as a culmination of our geographical science, do we seek knowledge of the way in which the cardinal natural features affect the character, the movements, and the distribution of men, and

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either form barriers to the intercourse of peoples with one another, or on the other hand tend to promote that intercourse. And besides noting the effect of the fixed features upon the mobile elements we want also to note the effect of the mobile elements upon the fixed—or, relatively speaking, fixed features.

If this be what we mean by geographical science a geographer could hardly hope for a finer field for his activities than India and the immediately surrounding countries present. Here we have every form of natural feature and in its most impressive aspect. We have the highest mountains in the world ; some of the greatest rivers ; the vastest deserts ; the hottest, the driest, and the wettest climates, and atmospheric movements on the most stupendous scale ; we have immense forests, both tropical and temperate ; animal and plant life in extraordinary variety and no less varied forms of human life. And we can see in one splendid example the interaction between a natural feature and Earth's mobile elements ; we can see the Himalaya Mountains arresting and condensing the moisture which the monsoon currents bear from the Indian Ocean and the Bay of Bengal, depositing it in the form of rain to the extent of over 600 inches in the year at one place on the near side and leaving scarcely any to fall on the far side. As a result we can see great and numerous rivers flowing down the near side and spreading their fertilizing influence over the plains below, and can see the mountains covered with the richest and most varied vegetation while the far side is almost entirely desert. We can note, too, the way in which such a stupendous feature restricts the movements and modifies the distribution of human beings. For if there were no Himalaya the stronger, more industrious and intelligent Chinese and Mongols would have overrun India ; whereas through all the centuries the two or three hundred million Indians have been effectively barricaded off from the three or four hundred million Chinese. Further we can note the way in which the mobile elements act upon the firm natural features, and can see the rainfall washing away the mountain-side, causing landslips and sometimes the collapse of whole mountain-sides, and carrying rich deposits to the plains below. We can note the forests holding up the mountain-sides, retaining much of the rain at the time of its heaviest fall and giving it a chance to percolate gradually to irrigate the plains below at the times when water is most wanted, when the rains have ceased and the dry season has set in. We can note, too, the effect of animal life—of goats, for instance, how they feed on the young sapling and so destroy the fresh forest growth, denude the mountain-sides, expose them to the full effect of torrential rainfall, and cause them to be washed away. Finally, we can note the work of man, how the improvident have cut and burnt down forests and thereby altered the whole characteristic of large tracts of land ; how the provident have carefully planted new forests and held up the soil ; how men have dammed up the waters here and led them into

channels there; how they have cut roads and railways along and over the mountains, bridged rivers and turned them to their use. We can, in fact, see man very very slowly, but without a pause, and at an increasing rate as the years go by, proceeding to the conquest of even so mighty a natural feature as the Himalaya. We see the mobile elements of the world obtaining the mastery over the fixed.

India therefore offers the finest opportunity for geographical enterprise; and like innumerable other officers stationed in India, I was early attracted to the Himalaya. One clear cold-weather morning, from out the dead level plain on which I was encamped I saw emerging a long grey-blue form against the sky, and was told that these were the "hills." They were only the outer spurs of the Himalaya and did not rise above 7000 feet. But in their dim mysterious outline they exercised a strange fascination. For one thing they pointed upward: they raised one's hopes above the monotonous level of the plain. There was a suggestion, too, of all kinds of marvels in mountain scenery hidden deep within that dreamy haze—majestic snowy peaks, awe-inspiring precipices, dark mountain gorges, rushing torrents: all the many joys that great mountains can afford.

Some time after I had my first experience of actual travel in the outer fringes of the Himalaya. The adjutant of my regiment had informed me that if I cared to apply for it the Colonel would give me two months' leave. I jumped at the opportunity, made my first plunge into the mountains, and so took my first footsteps in the pursuit of geography. And they were literally footsteps, for from the railway station at the base of the hills I walked the whole way on a round of several hundred miles, proceeding thus on foot chiefly from motives of economy, but partly because walking was easy for me then, and I was able once to walk 40 miles between 3 a.m. and 5 p.m. Starting from the foothills and starting on foot I was able to appreciate all the attractions of the Himalaya as they gradually unfolded themselves: first the pleasure of rising from the stuffy heat of the plain into the clear exhilarating air of the hills; then the joy of shady forests and fresh rushing streams; and at last the sight of real snow-clad mountains towering above me close at hand. And the further I progressed the keener became the attraction of the mountains. I wanted to get right up on to that snowy range, to get over it and see what was beyond. These peaks I saw were only 15,000 feet or so in height; but books and maps showed me that there were 20,000-foot peaks at the back. I wanted to see them too. Then there was a terrible pass over the higher range at the back; I wanted to gauge its terrors and see at first hand what a difficult pass was like. At length I came to the deep valley of the Sutlej, the river which comes down from Tibet, cutting its way clean through the great range of snowy peaks I saw before me—the main axis of the Himalaya. I wanted to follow up the river through the forests, through the gorges, and over one spur after another until I had

passed right through the Himalaya on to the plateau of Tibet. This particular journey I never made, though I wrote to the Society about it. But I relate my experiences and feelings because they show that while there is this great natural feature to attract there are also in India men who respond to the attraction and who are led on step by step in pursuit of geographical objects.

For I was, of course, only one of many hundreds of Englishmen in India who are similarly drawn to the Himalaya, some for sport, some for travel, some on administrative business, some for scientific investigation. In the first place are those in the great Survey Department whose professional duties have led them to make observations of extreme accuracy regarding the exact position and height of the great peaks; to carry a triangulation through the length of India and over the Himalaya to Central Asia; to map the topographical details of the mountains and to send reconnaissance parties in the countries beyond. The Geographical Society has awarded its Gold Medal to several officers of this department; and still living among these recipients are Colonel Godwin Austen, who originally surveyed as far back as the early sixties the glacier region round the great peaks of the Karakoram Range at the back of Kashmir; Colonel Sir Henry Trotter, who surveyed the Pamirs and the sources of the Oxus; Sir Thomas Holdich, who spent the greater part of his service on Indian frontier survey and boundary delimitation; Major Ryder, who was in charge of the Survey on the Tibet Mission, and who surveyed the upper course of the Brahmaputra and the region at the back of the Himalaya.

Besides the officers whose profession it is to determine the positions of selected points and the heights above sea-level with extreme exactitude, and to delineate the natural features accurately on maps, there are also numbers of men serving or living in India who are drawn to the Himalaya by sheer love of adventure, and who on their own initiative have undertaken journeys which have brought in valuable information and geographical results. Such were Captains Bower, Deasy, Rawling, and Bailey, and Mr. Carey and Mr. Sherring of the Indian Civil Service, all of whom penetrated the Himalaya and made valuable exploration in Tibet; Sir Aurel Stein, who has crossed the Himalaya and Hindu Kush at several points, and made journeys productive of valuable results in Chinese Turkestan; Dr. Kellas, who has made valuable surveys and observations in Sikkim and other parts of the Himalaya; Colonel the Hon. C. Bruce, the famous mountaineer; Dr. Arthur Neve, the well-known Mission doctor in Kashmir; and many other residents in India who have felt the lure of the Himalaya and been stirred to study and contribute to geography. There are Indians, too, who have done splendid geographical work, chief among them being Nain Singh, who was employed by the Survey Department and made reconnaissances of great accuracy in Tibet. There is also the remarkably adventurous Bengali traveller, Sarat Chandra Das,



Telephotograph, V. Sella

KANGCHENJUNGA AND PANDIM FROM GANTOK



Phot. by Bourne

KANGRA VALLEY

who has just died, who at great personal risk reached Lhasa more than twenty years ago, and who wrote an account, published by the Society, of the country and its inhabitants which I afterwards found of the very greatest assistance. Nor should we forget the intrepid surveyor, K. P., who explored the courses of the Brahmaputra between India and Tibet.

Thus India itself supplies a number of geographers, surveyors and pioneering explorers. And from here in England others have gone out. You yourself, sir, have been unable to resist the attraction of Kanchenjunga. I remember the interest that Sir Martin Conway's expedition aroused in us dwellers on the Kashmir frontier. Littledale explored Tibet and came down to us in India from the side of Turkestan. Longstaff came and cleared up one most interesting geographical problem.

Explorers came from other countries also. The American travellers, Dr. Workman and Mrs. Bullock Workman, have made several well-organized and scientifically equipped expeditions into the Karakoram range. Sven Hedin struck through Persia to India, then over the Himalaya into Turkestan, and thence to Tibet and back to India. The French traveller Captain de la Costa, and the German traveller Le Coq, crossed the Himalaya from the north. Lastly, there have been the Italian expeditions led by the Duke of the Abruzzi and Dr. de Filippi, which of all the expeditions from either India, England, or foreign countries have been the best led and the most scientifically equipped.

We see, therefore, that in India there are both the natural features which attract geographers and which are the subject-matter of geographical science, and also numbers of men to take up the great geographical work which lies ready to their hand. That is to say, there are available men of initiative and inspired by a love of adventure. And it is no less necessary to appreciate the value of these human qualities and understand the importance of developing them than it is to appreciate the importance of the Himalaya as a subject for geographical investigation. It is only by personal initiative and love of adventure that the inner secrets of the Himalaya will ever be discovered.

The love of adventure is, moreover, of value because it leads inevitably on from adventure in the physical domain to adventure in the world of thought. The explorer is brought in touch with most of the leading sciences, more particularly with astronomy and geology, but also with the sciences dealing with the development of plant-life and of the human race. Wonderful vistas open out before him in every direction. The field of exploration is illimitably increased. From having to use the stars to guide him on his travels he gets to live among them; he is eager to know more about them; his conception of the Universe continually expands as he hears of the tremendous distances of the stars, their number and their size; and his imagination inevitably strives to people some few of the

planets of these thousand million stars with beings, at least equal to ourselves in quality, if very different from ourselves in form. And from having to observe and describe the structure and character of the natural features among which he is travelling the explorer learns of the vast age of the Earth, of the vicissitudes through which it has passed, of its being composed of precisely the same materials of which the stars are built, and of its having originally been part of the same fiery stuff from which they also are formed. He feels, therefore, in direct and intimate connection with the whole vast universe; as he looks down the long avenue of times past which geology discloses, and as he becomes assured that there must also be a future of no less length, he is impelled to turn round and search into that future as far as he can see. And when he learns of the development of plant and animal and human life which has occurred during geological time—that is roughly during the last hundred million years—he strains his mind to conceive of the developments which must occur among us in the many million years to come. So it is that adventure in the realms of geography naturally leads on to adventure in the realms of thought; the pioneering habit grows, and the geographer learns to link his Science with Time past and Time to come, with Time immeasurable in each direction; and with Space, with Space if not absolutely and literally without limit at any rate with a limit beyond all possibility of human conception.

But if this spirit of initiative springing spontaneously from individuals, and their love of adventure which is the dominant characteristic of explorers, is to achieve all it ought, it must be fostered and encouraged by the community which will benefit from it, and must be organized and directed into suitable avenues by those best able to direct it.

I have given you proofs that there are individuals in plenty who have the initiative, the resourcefulness, and the enterprise to undertake geographical work of the most valuable kind in one of the most important regions in the world. But if the most is to be got out of the individual traveller he must be made to feel that the community is interested in getting that most out of him; that it really wants and requires what he can do for them, and will value his contribution to the common stock of human knowledge. He must be made to feel that the community expects the best of him on this line which he has chosen for himself of his own accord, and chosen presumably because he feels he has a special aptitude for good work along it. And to give this encouragement and support to individual travellers on behalf of the community, this Society—which is itself composed of men and women who have voluntarily come together from love of travel and adventure and interest in geography—is specially fitted. This is indeed the chief function of our Society, and it would be all the better if this were more widely known among those who might become geographers and explorers. It is not as well known in India as it might be that in numerous ways this Society puts out a helping hand to those

who seriously mean to contribute to geographical knowledge; that it is ready to help with advice; that it puts would-be travellers in touch with those possessing expert knowledge of the regions in which they wish to travel; that the Society's premises with all their books, periodicals, maps are at their disposal; that instruction in surveying is obtainable; that in approved cases instruments are lent and occasionally financial assistance given. For those resident in India most of these facilities are only available when they are in England on leave. But there is one form of assistance which is available to all, and that is the little work 'Hints to Travellers' written for and published by the Society. It contains valuable hints on all that concerns a traveller, and it was from this work alone that I was able to learn how to take sextant observations for the determination of latitude and longitude. In all these ways the Society helps the prospective traveller. Hayward years ago was given as much as £600 from this Society for his journey across the Himalaya to Chinese Turkestan. Deasy, Rawling, and others have received smaller grants and have been lent instruments; and among those who have received instruction was Lord Curzon. These things help the traveller during the prosecution of his journey, and when he returns from his travel with good results he may be sure of a hearty welcome at the meetings of the Society.

And it is well that the young traveller should receive all the encouragement and wise direction that this Society can give, for it is in making his first start that his chief difficulties lie, and in those fresh early stages of his geographical career that help is most necessary and most appreciated and most likely to bring fruitful return.

But besides directly helping individual travellers in this way the Society can also assist them by obtaining for them facilities from the Government of India and its agents. This assistance the Society affords in special cases; and when Resident in Kashmir I have myself had letters from the President of the Society asking me to give whatever help might be possible—for instance in the case of Dr. Longstaff. I venture to suggest that it is the proper part of Government to help a voluntary organization of this kind when it appeals to them, for the more of the world's work that is done by personal initiative and spontaneous effort, and the less that is done by state agency, the more will individuals develop individuality and the more likely therefore is the world to progress. For precisely the same reason that the Society should help and encourage individual travellers Government should help and encourage the Society, respond to its appeals, and increase its influence and power.

The Government of India must necessarily be circumspect in countenancing and helping individual travellers, for it has to be mindful of the welfare of the peoples in its charge, and has to beware also of travellers involving it in trouble with unruly people beyond the Indian border. Great hardships and risks are incurred in taking villagers on to glacier passes for example; and an inexperienced and tactless traveller may so

exasperate some frontier tribe as seriously to embarrass Government. Government has therefore to be cautious in granting its support. But if this Society assumes the responsibility of recommending a traveller the way is made easier for Government, and Government can then give most valuable aid to this Society by directing its agents to help the traveller in securing transport supplies and native assistance of all kinds, by placing at his disposal available official records and maps, and by putting him in touch with officials who have knowledge of the part in which he wishes to travel. This much at least Government can do to help the Society.

And Government on its side will reap many advantages from travellers making detailed investigations of its borderland. Without expense it gains additional knowledge of the countries over which its influence extends; and more important still it reaps benefit from having men at its disposal who possess an accurate knowledge of different parts of the borderland, and who have trained themselves in observation and gained experience in dealing with many varieties of people, often in very critical conditions. Military and civil officers of the Government of India when so employed during their leave increase their resourcefulness, experience, and capacity for serving Government; and Government is so far the gainer. And when the good offices of the Government are given to foreigners, Government may well feel satisfaction that they are in a position to afford the help. As an agent of Government I have had to help Frenchmen, Germans, Italians, Russians, Americans, and Swedes, and I have always felt pride that we British by our labours in India have been enabled to do this service for civilization in general. I have known the difficulties travellers experienced before we arrived, and I have seen the splendid results travellers in these days have been able to obtain on account of that order and respect which we have been able to establish in India. A century ago the Duke of the Abruzzi's and Dr. de Filippi's expeditions would never have been able to achieve the magnificent scientific results they did. They would not have been able to obtain the permission of the native rulers, nor the coolies, nor the supplies. The experiences of Vigne and Moorcroft show this. That these scientific results are now at the disposal of mankind is largely due to the position which the British have been able to establish in India.

And not only the Government of India but science in general gains by the enterprise of individual travellers and by the support which the Society gives them. Geography gains of course; but other sciences also gain, for Geography is the pioneer science; it paves the way for others to follow after. The geographical explorer pioneers the ground, the geologist, the naturalist, the anthropologist, the botanist, the meteorologist, the geodesist, follow where he has led the way.

Coming now to matters of detail and where particularly geographical work may be undertaken in the Himalaya and the borders of India, I would give the following as instances of the kind of work which might be done

Nowadays there is not much room for original exploration; travellers have penetrated almost everywhere. Still there are some parts not even yet explored. No human being has yet planted his foot on the highest point on the Earth's surface—the summit of Mount Everest, 29,140 feet above sea-level—or told us how men can stand such altitudes. There is, too, all that region near this mountain at the back of Nepal which has not been visited, though it has been observed from a distance by Ryder, Rawling, and Wood. Then there is still a gap in the Brahmaputra where it breaks through the Himalaya in its fall from the Tibetan highlands to India which has not been surveyed. Bailey and Moorhead surveyed sufficiently to prove that the San-po of Tibet is identical with the Brahmaputra of India, but we have not yet a complete survey of the course through the mountains. Nor do we know all we should like to about the region at the back of Bhutan, nor of that between Assam and China; and perhaps political difficulties may stand in the way of geographical knowledge for some time yet. But at the other end of the Himalaya there is an uninhabited part where there are one or two points of great interest to be cleared up. It is in the region at the back of the Karakoram range and of the great peak K_2 , the next highest mountain in the world after Mount Everest. When I was exploring this region in 1887 and 1889 from the north I saw a peak standing high above the others; and as it was near about where K_2 should be I assumed that it was K_2 and interpolated my position from it on this assumption. But the Duke of the Abruzzi conclusively proved that it could not have been K_2 . It must, therefore, be some unfixed peak, and what we require now is that some one should fix its position, determine its height, and give it a name. There is, I think, no chance of its proving higher than K_2 , but I should be surprised if it proves to be very much less than 25,000 feet in altitude, and as I was the first European to see it, and am in fact the only European who has seen it, I am naturally interested in hearing more about it. This mountain overhangs the valley of the Oprang—a river which I discovered in 1887—and it may be seen from a patch of shrub which I named Durbin Jangal, and which is about half a dozen miles up the valley from the foot of the Aghil Pass. In 1889 I ascended the valley of the Oprang for another couple of marches, but I had not time at my disposal to ascend the river to its source. That remains, therefore, to be discovered. I could see in the distance immense glaciers and mountains which must have been well over 20,000 feet in height, so there is an interesting little piece of exploration to be done here, and in a region so remote and difficult of access that I do not suppose that any human being has ever been there.

These are some of the fields for original exploration which still remain; but it is in the more detailed examination of parts which have already been pioneered over that the chief geographical work will have to be done in future. There is here unlimited room for work of the type of that done by Sir Martin Conway, Mr. Freshfield, the Duke of the

Abruzzi, Dr. de Filippi's and the Bullock-Workman expeditions—that is to say, of expeditions including highly trained specialists in particular branches of geographical science, skilled surveyors, photographers, geodesists, equipped with the best and most up-to-date instruments for the accurate determination of the position of cardinal features; of the height of peaks and passes; of the temperature and humidity of the air; of the drift of air currents; the amount of rain and snowfall; the advance or retrogression of glaciers, and so on.

All the detailed work has now to be done by skilled and trained observers and according to methodical plan. But I am not sure that it is necessary that such work need be done by means of big expeditions—that is to say, it may not be necessary that the surveyor, the naturalist, the meteorologist, the photographer, should all go together in one large party. In most parts of the Himalaya there is difficulty in getting supplies and coolies or transport animals for any considerable party, and a single traveller may be able to penetrate where a large party may find its progress hindered. I have led an expedition consisting of myself alone with only such men as I could pick up on the spot; I have led another consisting of myself, a native surveyor, and half a dozen Gurkhas as a guard; and I have led an expedition with a military escort of several battalions and a large political and scientific staff. Different types of expedition are necessary for different occasions. But I should like to lay stress on the point that very valuable work can be done by single individuals, and even by single individuals when they are very young. Any well-educated young Englishman could, with the assistance I have indicated this Society can give him, and provided he is keen and determined to make a good job of the work he is undertaking, do most valuable geographical work. He could for instance quite well discover and fix the position of the source of the Oprang River. Or he might make a speciality of the study of glaciers and proceed from one to the other, marking on the spot, surveying and photographing the snouts of the glacier, and noting all the indications and gathering all the information with respect to the question whether they are advancing or receding. Or he might specialize in photography alone and travel about taking, as is the habit of that great photographer Vittorio Sella, a few supremely good photographs of important geographical features. Or he might take up some special region and return to it time after time as opportunity occurs, making it his own, as it were, and getting to know it intimately and learning what more is wanted to be known about it. Or again he might take up one special feature, say one of the great rivers—the Ganges, the Indus, or the Sutlej—and trace and describe it as a whole. There is ample scope for the efforts of single individuals.

Women also can do excellent work—women of the type of the late Miss Mary Kingsley or Miss Gertrude Bell. They would, I believe, be especially useful in describing any particular locality in such a way as to

bring it truthfully and impressively before those of us who have not a chance of going there ourselves. This Society would not tolerate flashy journalese descriptions, but I am sure it would welcome the impressions of a cultured mind recorded with distinction and accuracy, so that we might understand the true inward character of a particular region. For if we are really to "know" some natural feature, a range of mountains, a valley, or a river, we must have something more than what tape measurements can give us. We must get imbued with its essential character and all its moods; understand its qualities, its strong points and its weaknesses and limitations. Such intimate knowledge of the essential character of a great geographical feature may be of high practical value. When sanction came from the Secretary of State for the Tibet Mission to go to Gyantse, the summer and autumn had passed and it had hitherto been presumed that it would be impossible to cross the Himalaya into Tibet in winter, and that we should have to wait for the spring. But putting my general knowledge of the Himalaya into conjunction with Mr. Claude White's and Captain O'Connor's knowledge of the particular region, I was able to advise Lord Curzon that we should be allowed to proceed at once, even though it would mean crossing the Himalaya in the depth of winter. We managed to cross in December and January and to keep communications open throughout the winter without any greater loss of life than troops are accustomed to expect if they are ordered to hot and malarial countries, and we had in consequence a full spring and summer for negotiations, and had proved once for all that Tibet could be entered at any time of year. These were valuable objects to have gained. But the point I now wish to make is that Lord Curzon in making his decision did not depend so much upon the data furnished by exact measurement, necessary as these data are for certain purposes, but upon that more intimate knowledge which is not susceptible of expression in terms of measurement of feet and yards and degrees and minutes, but which I submit may yet be called geographical. It was from Mr. White, Captain O'Connor and myself knowing the character and habits of the Himalaya, having, as it were, the "feel" of these mountains, that I was able to convince Lord Curzon of the feasibility of my proposal; and it was because he himself too had known the Himalaya that he was able to accept our judgment. Something more than measurements and mapping details must, then, be included in the term "geographical knowledge." An appreciation of the essential nature of geographical forms must also be included.

And I would venture to go further still. I would regard our knowledge of the natural features of the Earth as incomplete unless we are aware of their beauties. It is, as I conceive, no mean part of the duties of a geographer mentally to equip himself so that he may recognize the beauties nature can unfold to those with eyes to see. Discoveries in the realm of beauty are continually being made. A traveller should know of these discoveries so that he may himself be able to see them, and so that he may be

able to discover others. For what is quite certain is that in the forms of nature there is vastly more beauty than we now recognize. Only last month, for instance, I learnt of the beauty of rock. "Few people," says Mr. Reginald Farrer in his fascinating book 'Among the Hills,' "seem to have any adequate sense of the beauty of rock as mere rock. Without consideration of garniture or surroundings, rock itself can be one of the most beautiful things in all beautiful nature." He declares that many people have neither sight nor reverence, though gods as surely dwell in rock and cliff as in the oak or glittering water. All stone, he admits, has not the same mystery of holiness and beauty, but he thinks the noble limestone of our country the loveliest of formations that he knows. For if it has not the rosy blush of the Jurassic, nor the rich glow and glory of the Dolomite, yet its shades of colour, though gentler, are no less wonderful; and in form of individual block it surpasses either.

With this certainty that there is far more beauty to be seen than most of us—or even the best of us—see at present; and, with the assurance also that the more of this beauty we see the better we shall know and understand, I would urge that appreciation of beauty in natural forms should be recognized as part of geography.

But whether or no Geography as a science recognizes beauty as within its sphere, what is quite certain is that meetings of the Society like and expect travellers to describe the beauties of the mountains, rivers, plains, or valleys that they have been privileged to see. And this I believe to be a perfectly sound and reasonable instinct; for until we have seen the underlying beauty of natural features we have not really known and understood them—we are not therefore, as I would contend, completely scientific. Those who come and tell us of some new beauty they have discovered in a natural feature would be as welcome here as one who has discovered a new river. Wordsworth ought certainly to have had the Gold Medal of this Society, and Shelley and Byron, too, if they had lived till it was formed. I believe in future love of beauty will be as great a lure to the traveller as love of adventure. Prompted by these high motives, and joining to them a love of truth, the traveller of the future will observe with scrupulous accuracy and record with fidelity not only the outward appearance but also the inward soul and significance of the natural phenomena he meets with and their mutual relations to one another. And nowhere will he find a fuller scope for all his faculties of observation and description than in the sublime Himalaya and the far borderlands of India. I most earnestly recommend this wonderful region to the special notice of this Society, and hope that some amount of the attention it has hitherto devoted to Arctic, Antarctic, and African exploration may now be devoted to the Himalaya.

Before the paper the PRESIDENT said: No one can be better qualified to speak on the subject before us this afternoon, Geographical Work in India, than our Vice-President Sir Francis Younghusband. He knows the Himalaya



LARCHES NEAR LACHEN, SIKKIM

Phot. by V. Sella



Phot. by V. Sella

FOREST NEAR DARJILING