WILEY

Recent Exploration and Economic Development in Central and Western China: Discussion

Author(s): O'More Creagh, Lieut Somerville, G. J. Morrison and Logan Jack

Source: *The Geographical Journal*, Vol. 23, No. 3 (Mar., 1904), pp. 308-313

Published by: geographicalj

Stable URL: <http://www.jstor.org/stable/1774989>

Accessed: 27-06-2016 03:20 UTC

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at
<http://about.jstor.org/terms>

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.

Wiley, The Royal Geographical Society (with the Institute of British Geographers) are collaborating with JSTOR to digitize, preserve and extend access to The Geographical Journal

most other Eastern, nations, require no education to make them appreciate articles of foreign manufacture. It is only necessary to develop the natural resources of the province, and to give its population facilities for securing a market, to ensure that the money is forthcoming. The Sechuanese will then buy everything that he sees will wear better than the home-made article, or which he is unable to make himself, or which will be of advantage in saving labour.

After four months in Sechuan, during which time, as I have already said, we extended our geographical knowledge of this part of China by nearly 3000 miles of accurate mapping, we turned back towards Shanghai. I took a route on the north bank of the Yangtse, Captain Hunter to the south. This latter route had never been travelled over by Europeans, and as forming a chord line across the curve the Yangtse takes between Hankau and Chong-king, it may prove to be a valuable line of communication to turn our attention to, and I regret very much that Captain Hunter is not here himself to-night to give you details of it. His absence on active service in Somaliland prevents this. We met again at Hankau, when what made me most realize that I had come to the end of my journey and was once more in civilization was being initiated, on a Japanese steamer officered entirely by Japanese, into the gentle art of playing "ping-pong."

I have tried in a short space of time to give you a sketch of our journeys, and I am only sorry that some of it had to be taken up by narrative which might have been devoted to acquainting you more fully with the interior of Sechuan, and the industries and products of its fifty millions, to secure whose trade is of such importance to us. These rich Yangtse regions are those above all others in China which afford the greatest opportunity for the development of our commerce, and it is only by studying further these problems to which I have briefly alluded to-night that we shall be able to open up this extensive field to British trade; and as well-wishers of all that concerns one's country's prosperity and furthers her commerce, this should be the aim which all of us, when studying the geography of these regions, should keep in view.

Before the reading of the paper, the PRESIDENT said: Colonel Manifold has been so good as to prepare for us a paper on a very interesting subject—the upper region of the Yangtse and Sechuan. It is only a year ago since we had another extremely interesting paper from two officers—Captain Ryder and Major Davies—who made a survey of this province, and on that occasion we heard a good deal of what Colonel Manifold had done, and now we are very glad to be able to welcome him and hear him in person. I will now ask Colonel Manifold to read his paper.

General Sir O'MORE CREAGH: The only observation I can think of making without entering on one of those long problems which Colonel Manifold has drawn your attention to is that, in considering the railway system of China, it is well to recollect that where you see Belgian land it generally means either French or

Russian, and, my experience is, mostly Russian, because I think it is financed by the Russo-Chinese Bank, which is one of those institutions which can only be developed in a country like Russia, where the Government know what they want and intend to have it by any means. I think it would be a very good thing if we could have similar banks. My duties in China were of a military character, and so I am not able to say much about commercial affairs, but I think that we all saw very well that commercial affairs were founded on political affairs, and that all political influence in China is concentrated round the railways, and wherever a nation has a railway, there it has influence. With reference to Colonel Manifold's remarks about the Gurkhas, in these days when rifle-shooting is of such importance to us all, I may remark that the Russians got up an international rifle match, and challenged all the other troops in China, and we had a match extending over four days, and the troops which I had the honour to command—the Indian—defeated them all, hands down. They never asked us again to have a rifle match.

Lieut. SOMERVILLE : I don't think I have much to say after the lecture which Colonel Manifold has just read to you about the Yangtse. I have been up there for the last two years in command of the gunboats, and perhaps I can tell you one or two things about the navigation of the rivers. If you will look at your maps, you will see that between Ichang and Hankau there is a stretch of very bad water indeed. When the river is high, which is during the summer, the gorges are quite impassable. To give you an illustration of what it is, when I went to join the ship she was at Chung Ching; I left Ichang in a small Chinese boat. I loaded my boat with stores, and had all my clothes, but I had not got more than about 10 miles when the boat was capsized. I sent nearly all my stores back to Ichang, and started again. I went on for about twenty-six days, and at the end of that time I had got 61 miles. I then sent the boats back, and took to my own feet, and got up quicker that way. It is rather a job travelling across China in the summer on foot. However, I got to Chung Ching after about six weeks' travel. In the gorges in the summer you have a very high river. It goes up to 120 or 130 feet, and they are about 200 yards wide. Some Chinaman about two hundred years ago thought he would do a good action, and he cut a causeway through the rocks so that you could walk through. It is rather warm there in the summer. You look in the river, and there are whirlpools going across from one side to the other, and they talk of taking steamers up there! In the winter the gorges are all right, and you can steam through them splendidly, but there are two rapids then, called the New rapid and the New Dragon rapid, which are impassable. The New rapid was formed in 1896. The land slipped in after the heavy rains and filled up the bed of the river. No one up above knew anything about it, and all the junks were coming down, and five hundred were wrecked in a whirlpool at the foot of the rapid. The story is that it was the work of the dragon. A friend of mine—Mr. Ferdinand Tyler—was sent up there by the Chinese Government, and he tried to exorcise the dragon. This landslip, so it was said, had been formed by the dragon turning over in his sleep. Mr. Tyler got there—there is a telegraph-office—and he telegraphed to ask permission to begin. They telegraphed to tell him that first of all the ancient methods must be tried, to see if the dragon could not be moved, and then, if he would not move, Western methods might be attempted. Well, the dragon would not move, and Mr. Tyler started with dynamite and shifted a bit of the river. No navigation is ever going to pay there. Now we come along up to the stretch between the Hutan and Sui-Fu. Well, all that part is navigable, all through the summer certainly. You want plenty of steam; but it is all navigable, and there is a very good trade indeed.

In the winter it is navigable too, but when you get a very low river, parts are very shallow, and there is a very bad drop in one or two places. You can get up the river Min in the summer, but not in the winter. There is no doubt that between Sui-Fu and Chung Ching there is a very good opening for steamers to run, and a paying one, and I hope we shall see British steamers running there before we see anybody else's.

Mr. G. J. MORRISON: I am sure we have all to thank Colonel Manifold for his extremely interesting lecture on a country which has lately taken a very prominent place in international affairs. I think it is about twenty-three years since I read a paper here, or, at least, a paper of mine was read in my absence by the late Captain Gill on Journeys in China. Now, at that time very little was known by the public about that country. But since then so much has been said and written, that I don't think I can add very much to what we may call the descriptive geography of China. But I should like very much to say a few words on what I think I may call the commercial geography of China. The very poor state of the means of communication in China, and the necessity of improving them by the construction of railways, have been mentioned by Colonel Manifold. Now, the necessity of doing that was recognized a long time ago. It is more than a quarter of a century since I went out to China to construct the first railway. I laid the first rails; I superintended the running of the first train, and the issue of the first ticket—only to see my work pulled up within a year. Well, since then, naturally, I have taken considerable interest in Chinese railways, and have tried to keep up my connection with them. Now, in the intervening time, of course, a considerable number of railways have been made, and, although the entire length is not very great compared with the size of the country, it is still very considerable taken by itself. But one often hears complaints, or, at the very least, expressions of regret, that so short a length of those railways is in British hands. The Peking Syndicate, which is a British company, and which I see represented here to-night, has constructed some 75 miles of railway, and is going on with the construction; but that railway is in connection with their own mining scheme, and it does not yet form part of any through route, and has consequently attracted little attention. All the other British schemes as yet exist upon paper only, and that fact, coupled with the fact that preliminary concessions for these lines were granted years ago, is constantly brought forward by Englishmen and foreigners as proof of the want of enterprise on the part of the British concessionaires. Now, in the case of the Russian line, the German line, the so-called Belgian line, the various Governments have in each case taken a very active part, and in some cases they have taken upon themselves the entire construction of the line. The Americans, who work on a different plan, have just begun and carried out a very short length. Now, in England we have always looked upon private enterprise as very much superior to Government patronage, and if the Foreign Office do not take an active part in constructing railways or in guaranteeing them, however much we might wish to see them do it, still we must admit that they are only acting in accordance with the instincts of the nation. Now, although the Foreign Office have not actually taken up construction, they really have given some help. They have treated concessionaires much more favourably of late than they used to do in the olden times; and they seem to be anxious to do everything that they possibly can to advance their interests; and I think I may even say, I believe they think they have done everything that is possible. But I think that both the Foreign Office and the public have failed to see the great importance of one view of the subject, and that is, that if a railway is to be made by private enterprise, the money for making it has got to be raised from the investing public, who have to be shown

not that the line is important and will increase British prestige in the East, but that it will pay. [The President here reminded the speaker that his remarks did not bear on geography.] Under these circumstances I shall not say any more, except that there have been difficulties in the way of the concessionaires; that in spite of that they really have begun work, and I hope before very long we shall see a very fair length of Chinese railways in British hands, and I hope that the British may be able to supply traffic, not only on their own lines, but on all the others.

Dr. LOGAN JACK: It may seem ungracious and ungrateful to commence by expressing a regret that Colonel Manifold's travels have been so extensive. If they had been perhaps a little less so, we might have hoped for more of those agreeable details of incidents of travel and personal reminiscences of which we had only a very small instalment, and that instalment referred chiefly to the eastern or Peking portion of the journey; whereas I, at least, would have been very much interested in hearing similar incidents of the western portion, because I think those reminiscences could not have failed to be of historical value even as showing the state of affairs in the western part of China during the time when the "Boxer" rising was going on in the east and north. It was my lot to be travelling about the same time as Colonel Manifold in Sechuan. I travelled on the whole from east to west while he was on his way from west to east, and our routes crossed or touched in various parts, although we never met. But, especially when we got on to the Mekong, we heard that Colonel Manifold had been before us a few months, and we, at least, benefited so far by his experience, that we were able to avoid some of the routes in which he found many of his chief difficulties. I am glad that Colonel Manifold has borne such emphatic testimony to the necessity for railway communication between India and Sechuan, and the advantage of such communication; and I am more than glad that he has distinctly and unequivocally stated that during his travels a practicable route has been surveyed for a railway. Now, I think that is of the utmost importance. Everybody who has travelled in China knows what the Chinese roads are. The Chinese are gifted hydraulic engineers, but when it comes to road-making their engineering is most painfully crude, as you may have gathered from descriptions and photographs which have been offered to us to-night. Any one travelling over one of the Chinese so-called main roads might easily suppose that he might despair of ever seeing the iron horse in that part of the world, but it is a mistake to assume, as one might logically assume in any other country, that the route followed by the Chinese road is the best possible. It is very much the reverse, as Colonel Manifold has abundantly proved, I think, to-night. Civilization is indebted to him and to his companions, who have shown that away from the known beaten tracks of Chinese roads, tracks which have been beaten by the Chinese for years, there exist practicable routes by which railways might be carried. There are two classes of people who decry railway enterprise in the west of China. There are those who, in the first instance, say it is impossible, and those who have been answered already to-night, and I need make no further reference to them. The country is difficult, but it is not more difficult than the Rocky mountains and many other places where railways have been carried, and the only question is that urged by the second party, who say that the population is so scanty and so poor that the construction of railways for their benefit is not worth while. Now, that is a decidedly important question, and yet I cannot believe that a population numbering scores, if not hundreds, of millions is not worth catering for. If each individual of those millions of inhabitants will take 5s. worth per annum of foreign goods, and the carriage on those goods may amount to as much, then I think there is at least a beginning for practical financial returns on the outlay.

There are many things of which the Chinese are large consumers—for instance, there is clothing. The youngest of us is old enough to remember the heroic efforts which have been made to capture the trade of certain African tribes which wear a minimum of clothing. Now, there are no human beings who wear more cotton goods to the square inch than the Chinese—fold after fold, worn, I regret to say, till they are worn out; but, at any rate, fold after fold of thick padded cotton is added as the winter goes on, and they are, I should think, among the very best consumers conceivable of cotton goods. Then, again, there is the item of milk. That seems rather a trifle to us who get all the milk we want, but to the Chinese it is a very different matter. Their country is almost wholly used wherever it is possible for gardening purposes, and they do not have cattle for the purpose of yielding milk. If you can conceive, as I have noted with wonder, millions of babies born and growing up every year, and not a single milch cow in all that teeming country, then you can understand that the import of preserved milk is a very important item in Chinese traffic; and I have seen Swiss and other preserved milk in tins in portions of China where its presence seemed an absolute miracle, considering the difficulties of transport. Such a traffic as that is of value. Then, again, there is wool, which the Chinese do not grow, but the Burmese and other tribes do, and all of these would bring their wool down the rivers if a railway were available to carry it into the more settled districts of China. It is true that Yunnan is not so thickly populated as Ichang, but it is obvious to any traveller that the ravages of the Mohammedan rebellion are being rapidly recovered, and the country is being re-populated by immigration from other more settled districts of China where the population is becoming too dense. If I have read history aright, it is in countries where there is a growing population that the demands of commerce are most urgent. Now, in such a country as that which is being re-populated there is not only the daily demands of the inhabitants for their wants, but there is all the demand which arises from the stocking of new homes, and that is very important, and from the establishment of the new industries which are rendered necessary by a growing population. I don't wish to enlarge upon this subject, because the time is getting very short, but there are many such instances that could be adduced of industries that would go to feed a railway from whatever direction it comes. And I do hope that the spirit which led our fathers to conquer other districts of trade will lead ourselves or our sons to compete for the trade of Western China. I will only now take the opportunity of congratulating Colonel Manifold and the Society on the very important and solid additions to our knowledge of the China of to-day he has made.

The PRESIDENT: We have indeed listened to a most interesting paper, very beautifully illustrated, and it remains for us to pass a vote of thanks to Colonel Manifold. I think the point of greatest interest in his paper is the description of the upper reaches of the Yangtse and of the richness of those districts which he has described. The density of the population shows that when these regions are opened and the steamers are running on the long upper reaches of the river, which have been described in more detail by Lieut. Sommerville, it will become a very important region. He has described to us the agricultural products of that region, among which he numbered the potato, and suggested that it might have been indigenous there. I think this is a mistake. It was introduced into Tibet by one of the greatest of our governors-general—not the greatest, because I consider that our Gold Medallist and late Vice-President is the greatest of the governors-general of India—but Warren Hastings was amongst the greatest of our governors-general, and it was through his forethought and care in considering the nature of

the country in Tibet and to the eastward that the potato was introduced about 120 years ago. And it has undoubtedly spread from the valley of Lhasa into Sechuan. Colonel Manifold has enumerated many other products, and he has enlightened us very much both as regards the density of the population there and the value of the mineral and agricultural products. I am sure we shall all wish to pass a very cordial vote of thanks to Colonel Manifold for his most interesting paper.

GEOGRAPHICAL DISTRIBUTION OF VEGETATION OF THE BASINS OF THE RIVERS EDEN, TEES, WEAR, AND TYNE.*

By FRANCIS J. LEWIS, F.L.S., Assistant Lecturer in Botany,
University of Liverpool.

PART I.

THE survey covers the source and part of the drainage areas of the rivers Eden, Tees, Wear, and South Tyne, and includes a large extent of high-lying moorland on the Pennines. The map was begun during the summer of 1900, and has been continued at intervals during the past three years.

On account of the size of the survey, I have divided the map into two parts—the southern, which is now given; and the northern, which I hope to publish later.

The present paper includes parts of the counties of Westmorland, Yorkshire, Cumberland, and Durham, and covers a portion of the drainage areas of the Eden and the watershed on the south-west side of the Tees. The objects of the present survey, briefly stated, are to trace out the boundaries of the chief plant associations, and to endeavour to correlate their distribution with the geological, topographical, and climatic features of the district. As the area of observation is extended, I hope that some light may be thrown on the distribution of vegetation in former periods. At the same time, such a survey will form a record by means of which future changes may be measured.

The chief factors governing the distribution of plant associations may be summarized thus:

1. The chemical composition of the soil water, such as proportion in which the various salts occur, and the state of combination in which they may exist.
2. Physical characters of the soil, such as texture, proportion of air and water retained, etc.
3. Climatic conditions, such as slope of land, aspect, drainage, altitude.

* Map, p. 420.