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ON THE NECESSITY OF THOROUGH TEACHING IN
GENERAL GEOGRAPHY AS A PRELIMINARY TO
THE TEACHING OF COMMERCIAL GEOGRAPHY.

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[Address delivered to the Society in the Memorial Hall, on Wednesday,
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WHEN your secretary did me the honour of asking me to address you here this evening, I felt that I should best meet your wishes by selecting as my subject a topic on which I could speak from experience. I felt further that it must be some topic in which you in this locality would be likely to take an especial interest. "The Teaching of Commercial Geography" seemed to satisfy both these conditions. It is of practical importance to you in Manchester. As for me, it will, perhaps, be well that at the outset I should present to you my credentials, that you may know on what experience my opinions are based, and be able to assess their value accordingly. I know nothing of commerce, except as an onlooker. For a long time I have taken great interest in geography. In the last three or four years it has been my lot to do much geographical teaching and examination. I have had to examine in commercial geography, and to devote some thought to the preparation of myself for that duty. I shall give you, therefore, tentative opinions, not wholly without foundation in experience.

There are two classes in the audience to whom I would specially address myself, the merchants and the teachers. To each of them the subject before us is a practical one. It is for the merchants to state their demands—for the teachers to supply them. The merchants must decide what knowledge and what capacity they expect to find in their children and apprentices. The teachers must consider and experiment how best to convey what the merchants desire. I shall be well satisfied if what I say this evening has the effect of eliciting what cannot fail to be valuable opinions from either body of experts.

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I suppose it would be broadly true to say that two generations ago we English were an uneducated nation. There were educated classes among us, but as a nation we were uneducated. Now, I imagine that it would be about equally true to say that we are an educated nation. The last two generations have bequeathed to us a system of instruction whose net has caught the great mass of our people. The present and the next generations have a new problem to face. As we put the finishing touches to the extension of our system, we become uneasily conscious that, after all, education must be very carefully sifted and proportioned if it is not to produce evils nearly as great as those of ignorance. Very few even of professed teachers, with vested interests to defend, claim that our present education is perfect.

What do we expect to find in the educated man? Do we not expect to find him possessed of a double nature—an expert, *i.e.* a specialist, in his money-earning capacity, but the very antithesis of a specialist as a citizen, as a parent, as a member of "general society"? And is not the general complaint that our present education does not give this double nature? Else, what means all this cry, on the one hand, that we lack technical and commercial teaching, and, on the other, that our much-examined youth have lost their initiative and resourcefulness? Intermediate and higher education should be both liberal and technical. Commercial geography may be used to some extent as a means to both.

In olden days men got their technical education as apprentices. The apprentice system lasted until last century, in some callings until this. People are apt to forget how general a system it was. Until nearly the middle of the present century young doctors served apprenticeships. The organisation of most of our present schools of medicine, of most of our medical diplomas, and of the general medical council, has been the work of the last two or three generations. We still have articulated clerks in solicitors' offices. But in the case of the handicrafts, the collecting of industry into great factories has gone far to break down the old system—hence the cry for technical education in the narrower sense of the term. In addition, however, to professional education and to handicraft education, a third branch of technical training is called for—commercial education. Commercial men have usually to begin life earlier than professional men. It is therefore essential that a liberal element should be blended with the purely technical side of commercial education.

It has been agreed by all the authorities consulted—the Universities, the Chambers of Commerce, the Society of Arts—that among the subjects requisite to commercial education is commercial geography. But what is commercial geography? I am afraid that, as the result of much recent discussion, peo-

ple's minds in this country are somewhat clouded as to the real nature not merely of commercial geography but of ordinary geography. A great scientific man has recently written a book on the teaching of geography, in which he tells the teacher to teach as geography the orders of architecture and the homologies of animals! General information is by no means to be despised, but why rechristen it geography, and drive the geographers to seek a new name?

Commercial geography, as my friend, Mr. Keltie, has put it, is simply one of the applications of geography. It is applied geography—applied to the explanation of the phenomena of commerce—applied to the help of commerce. Application involves two things—a thing applied and a thing to which applied. In the present case geography is applied to commerce, and therefore it seems only rational to ask that, before any application whatever is made, something shall be known of geography and something of commerce. In the matter of commerce the boy must at least have some idea of the common process of trade—the growth or mining of the raw material, the sale of the raw material, the transport of the raw material, its sale again, its manufacture, the sale of the manufactured article, its transport, and finally its retail sale to the consumer. It requires considerable familiarity with the ways of trade to see readily why one route or one market is better than another, and by the time this familiarity can have been acquired the elements of geography must have been learnt, or they will never be thoroughly learnt. Moreover, it is a cardinal principle of teaching to teach one thing at once—first the geography, then the ways of commerce, and finally the application of the one to the other.

What, then, is the nature of the geography which must be taught as the basis of commercial geography? I am afraid that many people still fancy that to know something of geography is to be able to say where is Little Sandcombe-upon-Sea. This implies the idea that geography consists of so much useful or useless information. Such a geography would have done for the days before printing, but is commonly and rightly despised in an age of atlases and gazetteers. There is, however, another conception of geography—that it consists in the main of trained capacity, and only incidentally of information. My meaning will be best conveyed by an example. It shall be a commercial example. Suppose that I am told that a certain sample of wheat comes from Lahore, and that I do not know where Lahore is. I look it out in the gazetteer and ascertain that it is the capital of the Punjab, one of the eight provinces of India. If I know nothing of geography, I shall get up with the idea that Lahore is in India, and that will be about all. If I have been properly trained in geography, the word Punjab will, to borrow a term

from logic, probably *connote* to me many things. I shall see Lahore in the northern angle of India. I shall picture it in a great plain, at the foot of a snowy range, in the midst of the rivers of the Indus system. I shall think of the monsoons and the desert, of the water brought from the mountains by the irrigation canals. I shall know the climate, the seedtime, and the harvest. Kurrachee and the Suez Canal will shine out from my mental map. I shall be able to calculate at what time of year the cargoes will be delivered in England. Moreover, the Punjab will be to me the equal in size and population of a great European country, a Spain or an Italy, and I shall appreciate the market which it offers for English exports. This is geographical capacity—the mind which flits easily over the globe, which thinks in terms of the map, which quickly clothes the map with meaning, which correctly and intuitively places the commercial, historical, or political drama on its stage.

One of the chief reasons why the information-theory of geography has come to be so generally prevalent is the encouragement which it receives in examinations. Information is more easily assessed by marks than is capacity, and, therefore, information is very usually asked for in examinations which involve either competition or payment by results. We are suffering just now under a reaction from nepotism and purchase, but if selection by examination is to hold its own it will have to be greatly modified.

In this connection it will be well to draw a distinction between the commercial geography of the library and records of such a society as yours, and the commercial geography which a teacher should give to his pupils. *You* rightly aim at amassing and indexing a vast store of facts. The teacher should try to produce men capable of using that store with readiness and mastery.

Capacity with a trained geographical bias being our aim, how are we to produce it? The doctrine now proclaimed on all sides is that you must begin with the home. You must start with what the Germans call *Heimatskunde*. You must teach the streets, the roads, and the map of the immediate neighbourhood of the school. This is the true inductive principle, which undoubtedly required emphasising, but which can be pushed too far. Most subjects have to be begun dogmatically. Logical development comes at a later stage. The alphabet, the multiplication table, and, as I urge, the great outlines of land and water, must be taught young, and taught dogmatically. Our object at this stage is less to train the reasoning powers than to imprint on the yet plastic mind certain fundamental forms and relations which are to become its second nature. The root of all geographical ability lies in being at home with maps. Most people in this country require the aid of the name in the corner before

they recognise the outline shown. There are comparatively few who turn to the map as they would to the photograph of an old friend's face. If an errand boy were wanted in a Manchester office, would it not be expected of applicants for the post that they should know the business parts of the town familiarly? There is a great difference between the acquaintance of Manchester got by a stranger, Baedeker in hand, and that intimate knowledge which would enable a smart errand boy to carry a telegram by the shortest cuts, without a moment's calculation. There is the same difference, in a yet more marked degree, between knowing your notes and being able to touch them unconsciously on the piano in the execution of an opera.

A chief cause of awkwardness with maps is to be found in the one little atlas which was the companion of most of us for several years of our youth. France, as we think of it now, is the France of that atlas; Italy is the Italy of that atlas. We divide the world into parts as it happened to be divided there. The relative sizes of lands were determined for us once and for all by that particular collection of maps. In a word, we are wooden and rigid in our geographical vision, and no amount of subsequent correction quite atones for the original sin. Witness the difficulty many people have in following a lecturer who has occasion rapidly to range over the length and breadth of the world. The majority of his audience are out of breath as he hops out of one familiar compartment into another.

This tendency to crystallisation must be constantly guarded against. Why not draw Italy to-day, Italy with France and Germany to-morrow, Italy with Turkey the day after, &c., &c.? Thus the form would become familiar, but with different settings. Or why not draw England and India, on the same scale to-day, and Russia and India on the same scale to-morrow? So, too, with the text-book—why the chapter on France to-day, that on Germany to-morrow, and so on in sequence of countries? Why not constant comparison—the mountains of France and Germany to-day, the rivers of France and Germany to-morrow? The text-book should be a servant, not a master. The teacher should teach as he would teach geometry, with a succession of problems and riders.

If any large proportion of the community were thus trained, our books and newspapers would begin to save many quires of print by recourse to sketch-maps and diagrams, as they have already taken to pictorial illustrations. Thinking in terms of the map is an extra mode of expression, almost an additional plane of thought.

With such a preparation as this, commercial geography would be a fruitful subject. It would contribute both to the technical and liberal education of the commercial youth. As practical problems he would have to weigh the relative advantages of

alternative routes, to plan round voyages so that the ship should be most rarely empty, to balance the rival advantages of different lands for the growth of the same commodity, and so forth. Theoretically, he would learn the past geography of commerce; he would see in Tunis and Sicily the granaries of Rome, and would picture the overland trade from the East by Constantinople or Venice. He would so learn that the present order is not eternal, and would be keenly on the alert for change in the future. His geography would become suggestive in his commerce.

In the main, then, geography and its supplement, commercial geography, should be so taught as for ever to impress the mind of the learner with a certain number of great landmarks on the globe, and to give him the capacity and habit of so using those landmarks as to carry his mind with ease to any spot in the world, and to picture its characteristics and relations. And this, I contend, can never be done unless geography be first well taught apart from the commercial complication.

Teachers of commercial geography must keep in mind the fact that technical education is not aimed at making walking encyclopædias, but at turning out men who shall be supremely makers, doers; and commercial geography will be judged in the long run by the part it takes in making merchants who shall be ready, accurate, and imaginative.

Prince Henry of Orleans' Journey through Central Asia.—Some further details respecting the expedition of M. Bonvalot and Prince Henry of Orleans, to which we briefly referred to in our last number, have been received by the Geographical Society of Paris. The party, which includes a Belgian missionary, M. de Decken, who acts as interpreter, left Kulja about the middle of September last, and arrived at Korla, near Lake Baghrash, after a journey of 22 days across the Tian Shan. The route followed was first of all to Mazar, and then along the valley of the river Kash. The first mountain pass led them into the valley of the Kungez, a second pass into that of the Tsakma, a third into that of Yuldus, and a fourth into that of the Khaidugol or river of Karashahar, which is described as a gorge. Great variations of temperature were experienced during this short journey; 104° (Fahr.) in the shade in the valley of the Kungez, and zero (Fahr.) in the Yuldus valley. The greatest altitude reached was at the pass of Narat, which is about 11,500 feet high. Forty specimens of birds and mammals were collected. The travellers were *en route* for Lob Nor.—*Proceedings of the Royal Geographical Society.*

Pievtoff's Expedition in Central Asia.—Since our last issue further news of the progress of this expedition has been received. From its winter quarters at Nia, Lieut. Roborovsky had discovered a practicable route across the mountain range into north-western Tibet. The country beyond was found to be a tableland, 12,000 feet above sea level, desolate and uninhabited. The expedition will move forward at the beginning of April, and pass the summer on the plateau, descending thence in Sept. and travelling *via* the Cherchen river to Lob Nor.—*Proceedings of the Royal Geographical Society.*