

# WILEY



---

A Visit to Bokhara in 1919: Discussion

Author(s): Michael O'Dwyer, Aurel Stein and C. E. Yate

Source: *The Geographical Journal*, Vol. 57, No. 2 (Feb., 1921), pp. 87-95

Published by: geographicalj

Stable URL: <http://www.jstor.org/stable/1781558>

Accessed: 01-11-2015 09:28 UTC

---

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

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

<http://www.jstor.org>

The western Bokharan frontier is an undefined line in the desert some 5 or 10 miles to the west of the Oxus, but Bokharan subjects graze all over the desert between the Oxus and Murghab rivers, and the control of the Russians over their subjects in the Murghab valley is very loose.

From the Murghab river we had several days more of desert travelling to the Persian frontier, where we had a brush with a Bolshevik patrol, and it was with a feeling of overwhelming relief that we trod on the soil of Persia and were free from the tyranny inseparable from Soviet rule.

The PRESIDENT : We have listened to a long list of Fellows who have been elected, but there was to have been one elected whom I am sorry to say, since he was proposed at our Council meeting a fortnight ago, we have heard has died during a journey on the China-Burmese frontier. I allude to Mr. Reginald Farrer, and we do greatly deplore the loss of this traveller, because he was a man of exceptional refinement and culture, who minutely observed and very carefully recorded and described the natural features of the countries through which he was passing. He also had a peculiar knack of getting on with all kinds and conditions of people, including Government officials, and overcoming those human obstacles which are often the most serious obstacles with which a traveller is confronted. Only a fortnight ago I had a letter from Mr. Reginald Farrer dated from the borders of Burma and China in which he described his present two years' journey upon that frontier, and outlined another travel on which he had set his heart, and in which he had asked my help so far as I could give it, and that was to go to Lhasa in Tibet. We very much regret his loss, because I looked upon him as the forerunner of a new type of traveller, who, taking advantage of the pioneering of his predecessors, would have brought back to us those cultured descriptions of the beauties of Nature and of plant, animal, and human life in the countries through which he was travelling, which I consider are the very flower of geographical knowledge.

Our lecturer this evening is Major Bailey, whom we all know, and we are specially beholden to him, because for many years past he has been suffering some very severe hardships and strain. He was wounded in the battle of Ypres and in both legs in the Gallipoli campaign. He served afterwards in Baghdad, and from there he went to Central Asia, and was in hiding and eventually escaped from the clutches of the Soviet rule in Turkistan. He is, therefore, well entitled to a good holiday, but he has come here this evening to give an account of his experiences in Bokhara, and we are glad to welcome him.

*Major Bailey then read the paper printed above, and a discussion followed.*

The PRESIDENT : Sir Michael O'Dwyer, the distinguished Governor of the Punjab, is present. To him is due as much as to any living man that the Provisional Government of India of which we have heard never came into actual being. He has been to Bokhara, and knows something also of this great Indian Prince who was to rule in India, and perhaps he will very kindly give us some remarks about the lecture.

Sir MICHAEL O'DWYER : To-night I have had the honour of being the guest of the Geographical Club, and in that moment of enthusiasm which follows a good dinner I rashly promised the President to say a few words on the subject of the lecture. The President's request was based on the fact that I was once in Bokhara ; that is many years ago—as far back as 1896, and one's memory of

those times is getting blurred. But the admirable lecture which we have just listened to, and the excellent slides we have seen, recall a few associations of the days when I was in Bokhara. The memory which stands out more vividly than any other is this. I remember on a summer's evening early in May 1896 being on the railway station at Kagan, close to Bokhara, where there was a brilliant crowd assembled. The Emir of Bokhara was departing in a special train with a splendid retinue to attend the coronation of the Tsar of all the Russias at Moscow. A few months afterwards, being in Moscow, I had the opportunity of seeing again, not only the Emir, but the Tsar at the Coronation ceremonial, and now the two are associated in our minds with the same tragic fate which both have met at the hands of the Bolsheviks. The Tsar has lost his Empire, life, and all near and dear to him, and the latest news of the Emir of Bokhara is that he is a fugitive from his capital, that his kingdom is in the hands of the Bolsheviks, and the great city of Bokhara, which was the centre of Islamic civilization and culture and the great trade emporium of Central Asia, has now become a prey to rapine and bloodshed. One regrets the downfall of a great city like Bokhara. One hopes it may shake off the blight of Bolshevism and recover its pristine glory, which has won for it the title of Bokhara the Noble (Sharif). Most of us here in England may say it is a long way off and does not particularly interest us; but apart from the political significance of the events which have made the Bolsheviks dominant in Bokhara, events which cannot but react on Persia, Afghanistan, and India, this downfall of the Emir and the native Government has also very considerable economic importance. Bokhara is the great mart of Central Asia, and was a great outlet for British and Indian trade. The few days I spent in its bazaar I was astonished at their great wealth—to my mind, far superior to anything in India. The products of Persia, Afghanistan, of Northern India, of Western China, of Europe were all collected there and were being freely exchanged under conditions of order and security; for the Bokharan Government, to its credit be it said, during all the centuries during which it maintained its independence, was conspicuous for two great things. In the first place, it always protected trade and travellers, and, in the second place, it maintained a reliable gold currency which had never been debased, and which was accepted with confidence in every market from Nijni Novgorod to Kabul and Kashgar, if not Further China. When you note these two facts, the great protection given to travellers which attracted traders from every quarter of Central Asia, from India, Turkey, and Russia to Bokhara, and the stability of the coinage, you have the explanation of the wonderful success of Bokhara as a commercial capital. Major Bailey has told us of the great number of Jews and Hindus there. When I was in Bokhara I went to see the Indian bazaar. I found a large colony of Indians, quite happy and prosperous, and they were very glad to meet one who could speak their language. Directly I appeared they produced the Anglo-Indian national drink—whisky and soda! I believe at that time it was the only place in Central Asia east of Baku, if not of Tiflis, where you could get a whisky and soda; but my Indian friends at once produced it and the Russian cigarettes. It was interesting to note where they came from. There were a good many Peshawar Mohammedans amongst them, but the great majority were Hindus from Shikarpur in Sind, and there were a certain number of Sikhs and other Punjabis. I got into conversation with one fine Sikh and asked him how long he had been there. He was a little reticent about answering, but in the end I succeeded in getting from him that he came from a village near Amritsar and had been twenty-two years in Bokhara. I said, "Have you

no desire to go back?" All the others return every four or five years. He shook his head, and finally said, "Tell me, is Warburton Sahib still there?" Mr. Warburton was a famous Punjab police officer whom you find immortalized in 'Kim' and others of Kipling's books. I met Mr. Warburton some years later in India and explained how his name and fame resounded in distant Bokhara, and it turned out this Sikh was one of the men who organized in 1873 the murder of the Mohammedan butchers because they killed the sacred cow. Mr. Warburton got to the bottom of the conspiracy, and some were hanged, but this man got away and never dared to return.

Major Bailey has explained very clearly how Bokhara is dominated from Russian territory. It lies between the Transcaspian province on the west and the Turkistan province on the east. One means by which Bokhara is throttled lies in the railway which runs through those provinces and Bokhara being entirely controlled by Russians, and the other (and, so far as I could ascertain, the more effective method) of strangling Bokhara is the possession by Russian Turkistan of the headwaters of the Zarafshàn, which means "The Gold Scatterer"—that is, the waters of this river are so fertilizing that they produce the magic effect of gold. It brings down from Russian territory enough water for the irrigation on which Turkistan and Bokhara depend, but the Russian authorities control the upper waters and the supply below, and they sometimes say, "We want all this water for our own territory." Bokhara is particularly dependent upon the waters of this river, because so far as I could see the soil was in places steadily deteriorating. Wherever you watered from wells the water was brackish. The result was that the ground was covered with salt, and the only way of working off this was by copious inundations of river water. As I have hinted, Bokhara was the meeting-place not only of men engaged in honourable business, trade, and commerce, but also the refuge of some rather shady customers, criminals and political conspirators, and Major Bailey has told you of one of these who, though passing as an Indian prince, was plotting against the British Government. I saw something of the other side of the movement in the Punjab, and I do know that the information which Major Bailey brought back as the result of his thrilling adventures has been of enormous value politically as throwing much light, not only on the doings of the Bolsheviks, but on the intrigues of all the various anti-British factions which are gathered under the wings of Bolshevik Russia in Bokhara and elsewhere. This man Mahendra Partab was perhaps the most important of those plotters. He is a man who owned very large landed estates—now sequestered—in the United Provinces. He is married to the sister of one of the ruling princes of the Punjab. In his early days he developed a dreamy idealism which characterizes a certain number of the Indian revolutionaries. He read everything Tolstoy wrote and adopted those notions of Tolstoy's which to my mind have prepared the way for Bolshevism in Russia and indirectly for a similar movement in India. When he left India his sole idea was to bring about the downfall of the British Government, and prepare the way for the restoration of the mythical golden age of Hinduism. To do this he got into touch with the Germans at Berlin. He was introduced to the Emperor, I believe, as a representative of the Indian princes, and made a member of the Council in Berlin which during the war dealt with Eastern affairs. It was through him, and another man of the same kind, an Indian Mohammedan named Barkatullah, that the Germans endeavoured to foment rebellion in India. There were several other seditious Indians helping the Germans, but these two men had a certain amount of influence in India, and they deluded the Germans in Berlin into believing they could bring about

H

a rising there. You will be glad to hear, as showing the spirit of loyalty among the Indian princes, that whenever Mahendra Partab sent letters to his wife, who is the sister of an Indian prince, this prince at once took possession of these letters, and without opening them sent them on to Government. He also insisted that his sister and her family should leave the estates of and sever all connection with this disloyal rebel, and soon after that I think his property was confiscated. One other sidelight on Bolshevist methods came to my notice before I left the Punjab. The Bolshevists having established themselves at Bokhara sent their agents down to Kabul. A notorious Bolshevist leader appeared there named Bravin. It was interesting to see how clever they were in selecting the right man for the work. Bravin had been attached to the Russian Consulate in Calcutta for many years and made himself very well known there, and when the Bolshevist movement spread he was one of the first selected for special service in the direction of India. When the Afghans invaded India last year on the invitation of the Indian sedition-mongers and threatened all our North-West Frontier, their Generalissimo, Nadir Khan, had a big force at Thal in our territory which was smashed up by General Dyer. The Generalissimo fled in hot haste and left a lot of his papers behind him, including a very detailed plan prepared by Mahendra Partab and Barkatullah for the provisional government of India. As far as I remember, it got over the sectarian difficulty mentioned by Major Bailey of Mohammedan domination by sharing the position of the President of the Indian Republic between one Hindu and one Mohammedan! I do not know that there is anything else except I am sure we all hope that the old historic capital of Central Asia, which has filled so large a part, not only in the political but the commercial world, may be raised again to its pristine greatness. Bokhara has always had a keen demand for the best kinds of English goods. When I was in Bokhara the Russians had brought the Bokharan state within their trade system and imposed very heavy taxation against all goods of non-Russian origin. The Bokharan is as particular about his clothes, especially his head-dress, and cultivates the latest fashions in headgear, as an English or Parisian lady. The Russians had hoped to exclude English goods by putting on a very heavy tariff, but the Manchester muslin was of so fine a quality that no Russian loom could approach it, and the Bokharans at that time were paying fabulous prices for Manchester muslin smuggled in through Afghanistan, because they found it much finer than anything they could get from Russian sources. Bokhara under Bolshevist rule is, I believe, now entirely cut off from British and British Indian trade, and the Indian press reports that the city has been completely looted, and the merchants have all fled. Let us hope that this is only a temporary eclipse.

The PRESIDENT: Sir Aurel Stein, who made those wonderful journeys in Central Asia and more particularly Chinese Turkistan, is here, and we should be very glad if he would give us a few words.

Sir AUREL STEIN: It is a great honour to be called upon to offer any remarks after this fascinating lecture which we have heard from Major Bailey, telling us of wonderful adventures such as one expects to read of only in distant history, and after the most striking observations which my old chief and friend Sir Michael O'Dwyer has just given us on what is a very recent past in India and Bokhara. It is true I have been in Bokhara territory. But though it is only five years ago that I travelled through the whole length of the mountainous part of its territory, I feel as if it were old history. Four years ago there was still the Imperial power of Russia smoothing the way for



me in the service of the Indian Government, making things in Bokhara as easy for me as in any Indian native state ; and now we have had to learn of the wholly different conditions under which Major Bailey had to do his work.

I was travelling there in 1915 for scientific purposes. I wanted to see as much as I could of a very important ancient passage land which had once seen most of the intercourse between the classical West and the Far East. Sir Michael O'Dwyer has been rightly putting special stress upon the important fact that Bokhara from the earliest times has been one of the great commercial centres of Asia. This must impress any experienced observer of modern conditions in Bokhara itself. If reference to ancient history were needed, I have only to mention that Sogdiana (which was the old name of the territory which you have so often seen here on the map between the Oxus in the south and the Sir-darya or Yaxartes in the north) was a chief place of interchange between three great civilizations. I mean the Hellenistic civilization of the Near East which had penetrated through Persia ; then the civilization of India which had spread northward with Buddhism ; and thirdly, the culture, trade, and organized power of China, which for more than one century before and one century after the time of Christ, and again in the seventh and eighth centuries of our era, had maintained a dominating influence over great portions of Central Asia.

I shall not attempt now to give you indications of the many interesting facts we know about the part which Bokhara had played in the history of innermost Asia. I shall mention only one fact which will be of interest to you as students of geography : it illustrates how physical conditions determine the character of the population far more than race or language. We have heard here interesting accounts, and have seen too on the screen glimpses, of the present Turkomans, who have now happily resumed that rôle of nomadic robbers which the beneficent repression of the quondam Russian government had denied to them for a short period. In that very territory, long before the Turks had appeared on the stage of Central Asia, there had lived a people wholly distinct in language and race, but doing exactly the same things. They were those tribes of Iranian speech but nomadic habits whom the peaceful settled population of Persia knew and dreaded as "Turanians." Considering their ancient reputation it was quite amusing to me in Bokhara City to have to put up in a kind of hotel which called itself the "Turanski Numer." It was evidence how the term *Turan* had been brought to life again by the sort of Pan-Islamic propaganda that went on long before the war.

The historic rôle of Bokhara, I am sure, has not changed in essentials since those days when it witnessed the interchange of Persian, Chinese, and Indian civilizations, and I believe, whatever misfortunes that great city has recently undergone, geographical facts will re-establish its importance within a not very distant period. But I also believe that no change in the controlling power will ever dispose of the facilities which the desert, of which you have seen so many photographs, offers to people on its borders. The same Turkomans who now have taken again to the part of robbers had since the Russian occupation of Transcaspia in the seventies of the last century been obliged to content themselves with making plentiful money by cotton cultivation and the production of wool. Yet that period of some forty years of peaceful prosperity has not killed the ancient fascination of another and more congenial life which such ground must foster.

I wonder whether the present conditions will continue long enough for us to see demonstrated afresh the wonderful performances of the Turkoman

pony. When I was passing down the Perso-Afghan border in 1915—under conditions which, I may note in passing, were not quite those of peace—I had the good fortune to fall in with three Turkomans of the old type, then in the service of the British Consulate-General at Meshed. These men were employed to look after the Indian mail-bags passing through Afghan territory. They told me interesting details as to how those raids which once brought bands of Turkoman raiders right down to Seistan, some 400 miles off, were planned; how the ponies used for them had been trained, etc. I regretted then not to have had enough time for collecting more information on the subject. If conditions continue as at present, it may soon be possible to hear similar stories of modern raids.

There is one more matter with regard to which ancient history can be studied afresh on the same ground. Bokhara is a typical "terminal oasis," to use the proper geographical term, and such oases which derive their irrigation from the terminal course of a river are particularly dependent for their prosperity upon the maintenance of a firm government, not only in their own areas but also higher up. Whenever political troubles or similar disturbances lead to the neglect of, or interference with, the irrigation system at the canal head a terminal oasis is bound to undergo a great crisis, which, on such ground as Chinese Turkistan offers, may eventually result in complete extinction.

I have often been asked for my views as to how those ancient oases of the Tarim basin, now buried in drift-sand, which I had the good fortune to explore, had originally come to be abandoned. In reply I have always emphasized the limitation of the available archæological evidence. This could indeed prove within which period those oases were abandoned, what kind of civilization once flourished there, etc. But archæological indications in the absence of historical records do not suffice to show what was the direct cause which first started abandonment.

The human factor is a very complex one and liable to be affected by changes correspondingly varied in character. Among the possible causes leading to the abandonment of oases the theory which attributes it to "desiccation" also deserves careful consideration. It has found much favour since Prof. Huntington's very stimulating publications have made geographers and others familiar with the idea of pulsatory changes of climate leading to far-reaching historical effects.

It may be safely assumed that since those oases in Chinese Turkistan were abandoned to the desert the climate has become more arid, or anyhow the amount of water available for irrigation much reduced. But this does not prove that it was "desiccation" itself which caused abandonment in the first instance. A *post hoc* does not necessarily mean a *propter hoc*. I am unable to accept that assumption as a "working theory," because I realize the peculiar complexity of the human factor, and also because it is impossible to test such a "working theory" by experiment. This may be unfortunate; but in this respect geography, like history, differs from exact sciences.

If then we cannot have experiments, it must be of additional interest to observe that our own time supplies evidence that the area of Central-Asian oases like Bokhara can be affected very closely by political changes. From reliable information I received, it appears that the maladministration attending the present Soviet *régime* in Russian Turkistan and the consequent neglect of the canal system has led in Farghana to the abandonment of much land in the lower portion of the hitherto rich and closely cultivated tracts. Now, I suppose if I came back myself to that ground after two thousand years and found there

archæologically datable remains of settlements abandoned at the present period it would be so easy to come to the conclusion that this abandonment must have been due to climatic change bringing about increased aridity. Suppose that no records of the present period survive two thousand years hence, and it will be impossible then to prove that this conclusion was wrong and that the abandonment had been the direct result of a great political upheaval. Whether any scientist is prepared to explain the present period of upheaval on this globe of ours as due to increased aridity, I do not know. Anyhow, here is a case where the history of our own time aptly illustrates the difficulty facing the critical student when he is expected to judge of the causes of past events in the absence of actual records.

I wish only to add that all Major Bailey has told you and shown on the screen is indeed most instructive, not only to the geographer and the student of Eastern humanity, but to the historian as well. In geography we cannot make experiments; but here contemporary developments strikingly show us how historical changes affect all the aspects of human life with which geography is dealing.

The PRESIDENT: Colonel Yate was engaged thirty-five years ago in delimiting the boundary between Afghanistan and Russia in that part over which Major Bailey escaped.

Colonel C. E. YATE: I have never been in Bokhara myself, but I well remember coming to the frontiers of Bokhara and being received by a Bokharan Court of Honour, and I must confess I can endorse what Major Bailey has said when he described the Bokharan soldiers as giving the impression of extreme inefficiency. I never saw such an extraordinary collection of men in their yellow leather trousers over long top boots and most extraordinary arms and weapons; the music and band and whole turn-out were a sight I shall never forget. I know the part of the country south of Bokhara stretching from the Oxus to the Persian frontier, where I spent several years in the delimitation of the Russian and the Afghan frontier. After some two years in the country with the Afghan Boundary Commission under General Sir Peter Lumsden, I was finally sent out to build up all the boundary pillars in that whole tract of country. I followed Major Bailey's journey across the desert with the greatest interest. I remember when, after travelling through the desert, we came to the end of our journey on the banks of the Oxus, the Russian officers and ourselves embarked on a boat and floated down that river till we got to the railway, and then went on to Merv, and so home. We had a wonderful time travelling down the Oxus, and we never stopped day or night. I remember we had certain food in tins with us to eat, but the Russians had nothing to eat but a sturgeon, and that we found so good that we all fed for days on it and never touched the other things. When Major Bailey described his crossing of the Oxus I was wondering how he would get across. We saw the picture of the boat he crossed in, and apparently, I understand, they rowed the boat across. At Kilif I remember seeing a similar ferry-boat to the one shown, but that boat was drawn by a couple of horses. They were harnessed to the boat and went into the water, and a man stood in the bows with a whip, and those horses swam across. It was a curious instance of what horses can do. I never dreamt till I saw it that a couple of small horses could take a big, heavy boat across such a deep and swift river nearly half a mile in breadth. I had to demarcate the boundary from Meshed to the Oxus, and had to construct all the pillars as marked on this map. Every one who has travelled in these regions has vivid recollections of the bitter water and salt wells referred to by Major



Bailey. I had to live for a fortnight once on a well of Epsom salts, and I well remember it! Another thing that I sympathized with Major Bailey in was the snowstorm he told us of. I remember starting one April day with thirty camels laden with water out into a waterless tract of desert. That night a most awful blizzard came on, and by the morning there were a couple of feet of snow. The muleteers had left the corn for the mules behind because the young spring grass was up, and the animals would look at nothing else. The snow came down in this awful blizzard, and though the horses and mules tried to get down through the snow to the grass, they could not do it, and were very near starving. There it was that I came to realize what a splendid guide a Turkoman is. He seemed to know every well and road in the country, and carefully guided us through the storm to a place where we could find wood, light a fire, and get some food both for man and beast. I have ridden hundreds, I may say thousands, of miles with these Turkomans, and they never once failed to guide me right. Sir Aurel Stein has told us of the Turkomans who were on the mail line between Meshed and Herat. They were there with me when I was Consul-General at Meshed. All those Turkomans refused to go back to service in Russia when Panjdeh was taken by Russia in 1885, and asked to become British subjects. These men, I believe, are still in the British service, and employed on the same postal duty between Meshed and Herat, and I can only say they have always been most extraordinarily faithful followers of the British Government. They were robbers, it is true, and I suppose when the opportunity occurs they always will be robbers. They used to raid the whole of the Persian frontier in olden days, carry off slaves, and keep them. Whether this will break out again, as has been suggested, I cannot say, but we on the Afghan Boundary Commission found them capital fellows, and I certainly have the most pleasant recollections of them all. While on this frontier we found a most beautiful species of pheasant. When Colonel Peacock of the Engineers and myself were demarcating the boundary, we used to go out with the Turkomans and ride these pheasants down, as after two or three flights they used to hide in the snow, and their tails betrayed them. We brought home half a dozen, and they were declared to be a new species and named *Phasianus Principii*, or Prince of Wales' Pheasant; but it was found that they would not breed in captivity. They were magnificent birds. I was at Panjdeh at the time when the Russians drove out the Afghans. Within the last few days we have heard that the Afghans have now some troops in Merv, but what is going to happen there we none of us can say. Although the Afghans are in Merv, we hear that the Bolsheviks are in Kushk, to the south of it, and consequently I do not think that Merv can be now the frontier of Afghanistan, as I have heard said, because whatever Government is in power in Russia, their hold on Central Asia depends on that one line of the Transcaspiian railway, and I cannot think any Government in Russia will allow the Afghans to cut that line. I was at a lecture the other day by a very well-educated young Afghan. He dwelt on the advantages of a Mohammedan federation in Central Asia between Afghanistan, Persia, and Bokhara. Now what has become of the Emir of Bokhara none of us know; he has been driven out by the Bolsheviks, and is in flight. There is no love lost between the Usbegs of Bokhara and the Afghans as a rule, but whether they will join up now under the terrible threat of the Bolsheviks is a question that has still to be settled. There is also no love lost between the Afghans and the Persians. The Afghans overran Persia years ago—they may do it again. We hear a great deal now about the defence of Persia from the Bolsheviks, and the few troops we have in North-West Persia

What will happen there none of us can say. Whether the Persians will accept our agreement or not none of us know. I cannot help thinking that if we do come to a Mohammedan federation in Central Asia it would conduce to stability in those regions, but none of us can say what will happen there. We can only hope that the Afghans will see wisdom, and that they will turn to the British instead of to the Bolshevists, and that we shall not have any fresh trouble with them as we had last year, when they so outrageously and wantonly attempted to invade India.

The PRESIDENT : I am sure we should wish to congratulate Major Bailey upon his wonderful escapes and the great resource which he showed in dealing with critical situations. He is the most remarkable man I know of for getting himself into nasty situations and getting himself out of them again.

---

## MODERN DEEP-SEA RESEARCH IN THE EAST INDIAN ARCHIPELAGO

Prof. G. A. F. Molengraaff, of Delft

*Read at the Meeting of the Society, 7 June 1920. Map following p. 152.*

SUBMARINE topography all over the world is much simpler than the topography of the subaerial portion of the globe. This is, at least near the continental borders, evidently the consequence of the covering or blanketing influence of continuous sedimentation on the relief of the sea-bottoms contrasting with the carving and sculpturing influence of never-ceasing erosion on the land surfaces. Wherever this rule does not hold good the submarine topography, not yet being obliterated by sedimentation, must be of recent date. A bold relief of the sea-bottom is therefore, at least near the continents, apt to indicate portions of the Earth's crust which either have been warped in recent geological time or still continue to be orogenetically active, and thus continually rejuvenate and remould the sculpture of their surface. In this paper the latter alternative will be discussed for the Australasian seas.

One of the major results of deep-sea research, a branch of science of modern date, has been the statement of the fact that the so-called mediterranean seas are, as compared with the grand oceans, characterized by a bold and diversely developed submarine topography.

Mediterranean seas are, as the name indicates, seas which separate continents one from the other ; in a somewhat narrower sense the name is given to those mediterranean seas which separate the great continents of the northern hemisphere from the southern continents, viz. the Caribbean Mediterranean between North and South America, the Mediterranean Sea in the strict sense between Europe and Africa, and the Australasian Mediterranean sea between Asia and Australia.

One of the peculiarities of the topography of the mediterranean seas proved to be the existence of basins, often of great extent, separated from