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*The Regions of the Upper Oxus.** By ROBERT MICHELL.

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“AND first,” says Purchas in his ‘Pilgrimage or Relations of the World, and the Religions observed in all Ages,’ “we must begin with Asia, to which the first place is due, as being the place of the first men, first Religion, first Cities, Empires, Arts; where the most things mentioned in Scripture were done; the place where Paradise was seated; the Arke rested; the Law was given; and whence the Gospell proceeded; the place which did beare him *in his flesh*, that by his Word beareth up all things.” The divisions which Purchas proceeds to make of Asia, are, he well observes, “not so exact as may be wished, because of that varietie and uncertaintie in those Kingdomes.”

If in a description of the world the first place is due to Asia, the first place in a description of Asia is due to that particular portion of it where the seven terrestrial paradises were located. One of these, as is maintained by Sir Henry Rawlinson, was in the valley of the Sogd, Kohik, or Zarafshan, where Samarcand is situated; some others were presumably in the smiling valleys of mediæval Chaghanian, Kotlan, and Wakhsh.

I do not know whether Karateghin may be included in this category of paradises, but as it is in the very heart of Inner Asia, I propose to bracket it with Darwaz or Wakhsh, and to devote this paper exclusively to those two provinces.

How far ancient Bactria extended in this direction is not, I think, precisely known, but we do find Alexander the Great fighting against and defeating Bactrian armies north of the Oxus, and on the eastern confines of Sogdiana or modern Bokhara. The Alexander of our age has since the year 1864 been steadily approaching from the north to this region of paradises, the fifteenth creation of Ormuzd, according to

* Vide Map of Central Asia in Part 2 Vol. I. Supplementary Papers; and of the Pamir in March No. ‘Proceedings,’ 1884.

the Vendidad, and he is now ominously near to them. On the east he already commands the sources of most of the seven life-giving rivers of Mount Meru. On the north he commands the passes into the Alai Valley and into Karateghin, and holds the valley of the gold-scattering Zarafshan. On the west he guards the entrance into the happy valleys of Hissar and Kulab from near Kitab and Shahr.

The Amir of Bokhara is old and frail, and the right of succession of any one of his sons is not guaranteed by the White Tsar. It is therefore to be expected that in due time the keys of the gates of these paradises of Inner Asia will be suspended from the girdle of his Imperial Majesty the Emperor of all the Russias.

"No place is impregnable to the brave or secure to the timorous," was the favourite maxim of Alexander the Great. There are winged soldiers like those of the great Macedonian, who scaled the rock at Derbend, even now in Asia, and the word has only to go forth for the Russian eagles to rest on all the eyries in Hissar, Kulab, and Darwaz, as on the Pamir at Kara-Kul Lake, which absolutely command the entire basin of the Oxus river from its very sources. How easy it is to subjugate the inhabitants of those regions is illustrated by the single fact that the Chinese seated in Eastern Turkistan, exacted and received from them tribute and homage which was paid without demur.

If an ethnographic line of demarcation were traced it would properly run along the Hissar range from the Alais, terminating at Kilif on the Oxus, separating as a distinct race of people the Persian-speaking Tadjiks of the mountains from the Uzbegs of Ferghana, Russian Turkistan, and Bokhara.

So long as Bokhara lasts as an independent state, no political heart is likely to beat in the mountain districts so circumscribed, but a Russian satrap in Turkistan setting the stamp of his authority over them would assuredly create a body politic in those parts, and begin by arousing and fomenting discord and animosity between the Sunni and Shiah Mahomedans who are separated by mountains rising between Darwaz and Roshan. And on the first opportune occasion, Afghanistan would be shorn of her trans-Oxus possessions.

The region to which I beg on this occasion to invite attention has until very recently been the most obscure, as it is one of the most inaccessible, parts of Inner Asia. It was a perfect mystery to the Greek and Arabian geographers, and even in the sixteenth century it was a *terra incognita* to Baber, although that illustrious monarch succeeded his father in the sovereignty over the neighbouring country of Ferghana and ruled in Samarcand, where, in his time, "there was an observatory on the skirts of the hill of Kohik, three storeys high, and provided with an astronomical apparatus,"—"one," observed Baber, "of only seven or eight observatories in the whole world." "I once had a fancy," Baber says, "that I might go by way of Karateghin"—that is a part of the region

to which I am alluding—but he abandoned the idea, nor does it appear that even as a fugitive and wanderer in the mountains of Ferghana did he stray into those remote and dark corners of Central Asia from over which now at last the veil is being lifted.

Karateghin was so called even in Baber's time, and it has preserved its name. Not so, however, the district bordering it on the south—now called Darwaz, which was but vaguely known in former ages as Wakhsh.

Karateghin with Wakhsh or Washjird, Kotlan (now called Kulab), and Hissar, which are now dependencies of Bokhara, formed part of the broad territories of Kosrou-Shah, Baber's arch enemy, who in the end, according to Baber himself, was reduced "in the space of half a day, without battle, without contest," with the aid "of only 200 or 250 tattered-demons," to a condition of abject misery.

Before the year 1878 no European traveller had set his foot in this country. Chinese travellers skirted it on the north, and Portuguese and Genoese passed either far to the west of it through the Castle of Gog and Magog, first mentioned in the prophecy of Ezekiel in reference to the desolating hordes of Scythians who had made repeated inroads into Persia and Assyria, or to the south of it by way of the southern sources of the Oxus.

On Waddington's map of 1826, notwithstanding the marvellous amount of knowledge acquired and so well marshalled by that distinguished geographer, Karateghin and Darwaz were left to the imagination. Kiepert's map to Ritter's Asia (1852) showed a great improvement indeed, resulting from a digest of subsequently revealed itineraries. Here, already was the Wakhsh or Surkhab river traced down to the Oxus from the mountains south of Kokand or Ferghana, made, though it was, to appear even as the main stream of the Oxus itself. But Darwaz was still lamentably out of place. On Arrowsmith's map of 1872—that attached to Sir Henry Rawlinson's 'England and Russia in the East'—there was a still more marked improvement, while there was yet a falling off and a retrogression similar to that which we discern on General Walker's map of 1881, when we compare it with the one published by him in illustration of Sir Douglas Forsyth's mission to Yarkand in 1873. All these maps, as touching Darwaz and Karateghin and the Western side of the Pamir, are "lights of other days," and require reconstruction.

We cannot, I think, blind ourselves to the fact, and we ought candidly to admit, by way of returning the compliment, that by far the best maps of Central Asia are those which are now produced at St. Petersburg. Englishmen have indubitably laboured more to unravel the tangled web of conflicting ancient and modern data, and no one in this respect has excelled Sir Henry Rawlinson and Colonel Yule; but a journey or two, easily performed under protection and in perfect

security, has enabled Russians in a few months to establish facts which were being slowly though surely realised by English geographers by means of the closest investigation of topographical and historical records.

Darwaz and Karateghin, together with Hissar and Kulab, are provinces of Bokhara. They are all separated from Bokhara proper by mountain ranges of considerable altitude, and they are not very easy of access from the north. For all that, they were, when occasion arose, subjected to the rule of the Amir of Bokhara without much trouble. The *Sarbaz* occupied Kulab, Darwaz, and Karateghin without any opposition worthy of the name, and the *Nuker* holds it without any apprehensions of rebellion. The reason of this, on close inquiry into which I need not enter here, will not be found to be very perplexing. It may be admitted that Karateghin, Darwaz, and Kulab did indeed, in a certain sense, possess an independence under their own native hereditary shahs; but that independence must not be supposed to imply strength, nor should it be imagined that under their own native chiefs the people were happy and contented. The account which has been given of the *Galchas*, or "poor wretches," of Darwaz and Karateghin by Mr. Arendarenko impresses us with the conviction that they have for the first time known real contentment and happiness, and in this truest sense independence, only since the removal of their own tyrannising and extortionate hereditary rulers. They have, it is true, no longer a separate political existence, but they are, it seems, in consequence of that, free from the cruel and terrible vicissitudes of political life. There is amongst them a complete cessation of internecine feuds; the several districts, formerly under separate governments, no longer prey upon each other, and there is harmony and apparently a freer intercourse between the several populations.

With the cessation of all political jealousies the Russian traveller now enjoys perfect immunity from those dangers, engendered by political intrigues, to which Europeans—mostly Englishmen—have elsewhere and on various occasions fallen victims. In no part of the world, perhaps, is there a people more docile or tractable than the inhabitants of Inner Asia, but nowhere has the life of the foreigner so entirely depended on the caprice or cunning calculation of the unscrupulous independent or semi-independent chieftains. The centre of government is now far away outside the confines of the several valleys which compose these hill districts; there is no rivalry for power either between individuals or clans; the hereditary rulers are shelved; there is no false political patriotism, common to the Kirghiz, the Galchas or Tadjiks, and to the Uzbegs, deriving its baneful inspiration from an arbitrary and restless central figure within the region.

The Amir of Bokhara has judiciously disposed of the brotherhood of rival native chiefs; he has not patched up an incohesive State which would be weak and perpetually agitated within, and inviting attack

while subject to intrigue from without; he has not ventured to form out of an agglomeration of distinct valleys a "strong, independent and friendly" State on his borders, knowing doubtless from an example on the other side of the Oxus that such a combination would be fraught with danger, and would lie at the root of much evil.

The flood of light which has been thrown over the regions of the upper Oxus is a result of labours performed in the seventh decade of this century by various travellers. Messrs. Johnson, Hayward, and Shaw, in 1867, gave the first impetus to these explorations, and were followed by the mission of Sir Douglas Forsyth to Kashgar in 1870 and 1873. These enterprises gave a stimulus to Russian exploration from the north. My friend the late and much lamented Fedchenko, accompanied by his wife, broke ground from the side of Ferghana in 1871, rendering most distinguished services to geographical science and to natural history. After him, in the year 1876, the conquest of Kokand enabled the Russians to plunge into the country of the Pamirs with a military expedition led by the late General Skobelev.*

These journeys, missions, and expeditions were all consequent on the formation of an independent Mahomedan State in Eastern Turkistan by Yakub Beg, of Kashgar. One of the incentives in the matter of this laudable rivalry between ourselves and the Russians to unravel the few remaining mysteries of Central Asian geography was doubtless a political anxiety, on both sides, to determine the respective limits of the dominions of the Amirs of Afghanistan and Bokhara.

Elphinstone's mission to Cabul in the early part of the present century is perhaps the proper foundation of all our knowledge of the geography of Central Asia, and Wood's journey to the sources of the Oxus, coupled with the travels of Moorcroft and Trebeck and the explorations of Mir Izzut-Ullah, contributed to the erection of a large geographical superstructure. The labours of Gordon and Trotter, who have so greatly distinguished themselves, and who were really the first explorers of the Pamir after Wood, were supplemented by those of the Havildar and of the Munshi Abdul Subhan. In the year 1879 a native Indian gentleman, known to us only by the initial letters M—S—, executed a survey, to which I shall have occasion to refer further on.

The results of the numerous Russian surveys of the Bam-i-Dunia (Roof of the World), as we have been taught to call the massive elevations in the region of the Upper Oxus, and of the upland provinces of Bokhara in the intricate elevations which unite the Thian-Shan with the Himalayan mountain systems, are to be found in the writings of Messrs. Mayef, Arendarenko, Mushketof, Severtsof, Oshanin, and Regel, some of which have been translated † and published in the Journals and Proceedings of the Royal Geographical Society.

* Journ. R. G. S., 1887.

† 'Proceedings Russian Geographical Society,' Part I., for 1881.

Mr. Oshanin's paper on Darwaz and Karateghin has not yet had full justice done to it. I will therefore refer more particularly to him, since Captain Kostenko, in his recent work on Turkistan, has used his memoir without the slightest acknowledgment,* bearing constantly in mind that I am humbly following in the footsteps of those Nestors of geographical science, Sir Henry Rawlinson and Colonel Yule.

The results of Colonel Matveyef's journey to Faizabad in Badakhshan are still an unknown quantity. Taken in conjunction with the accounts of the various Pamir and Hissar expeditions, and with the information gathered by Colonel Grodekof on his ride from Mazar-i-Sharif to Herat in 1878, the amount of the Russian gleanings is very considerable. We have our own sources of information published to the world; but of a public as well as of a "secret and confidential" nature the Russians, since the years 1878 and 1879 in particular, have without doubt accumulated enough to dispel all but a few lingering doubts.

The late Mr. Fedchenko recorded in his 'Travels in Turkistan' his expectation and his hope that the exploration of the Pamirs would be finally effected by his own countrymen. He believed this would be the case because the Pamirs are much easier of access from the north than from the south. He observed that Englishmen attempting to reach the Oxus basin from India would have to traverse a broad belt of mountains, occupied by barbarous and hostile tribes, whereas a Russian, journeying from the north, would encounter no insurmountable difficulties, and might lay any wager that he could cross from Tashkend to Wood's Lake and return within the space of one month. Even in Mr. Fedchenko's time the Russian influence with the Amirs of Kokand and Bokhara was sufficient to secure a safe-conduct to travellers to the uttermost confines of their dominions. Since the Russian annexation of Ferghana, together with the outlying region of the Alai, the facilities afforded to Russian surveyors have been of the greatest.

Darwaz and Karateghin are situated between $69^{\circ} 30'$ and 72° E. longitude of Greenwich, and between 38° and $39^{\circ} 30'$ N. latitude. Karateghin occupies the middle course of that largest tributary of the Oxus which flows from the northern limits of the Pamir table-lands under the names of the Kizyl-su, the Surkhab, and the Wakhsh. Darwaz occupies the middle course of the Panj, or main head-water of the Oxus, and it embraces, in the direction of Karateghin on the north, the valley of the largest tributary of the Surkhab, called the Wakhia-Bala,† the Khulas, the Wakish, and the Hing-ab.

These two provinces of Bokhara are walled in on all sides, and separated each from the other by chains of snow-capped mountains, averaging in height from 16,000 and 18,000 feet above sea-level on the north-east, east, and south, to about 10,000 or 12,000 feet on the west.

* This has been complained of in the Russian 'Geographical Proceedings'.

† Bala means *Upper*.

From no one single point of the compass are these "Zindans," or strongholds, as the natives call them, to be entered but by clambering over the most "tooth-breaking" passes, as some of them are called in that quarter of the globe, or by trudging over glaciers and frost-crueted snows. The camel has no home within these fastnesses; even the *ishak* or sure-footed mule is as great a rarity there in a live state, as is a dead donkey anywhere else. The goat on the other hand is common, but as that animal never "gives a back," locomotion through Darwaz and Karateghin is mainly pedestrian. The horse is only the luxury of those in Darwaz and Karateghin who can afford to have a wife or two, that is, of the "Galchas" or Tadjik, "poor wretches." For all that, however, travellers have not been deterred from following the more direct routes from Badakhshan to Kokand; thus Abdul Mujid gave us an account of his passage from Kokand through Karateghin and Darwaz in the year 1861. And notwithstanding the barriers at all corners of Karateghin and Darwaz, immense herds of sheep and droves of cattle are driven up over hundreds of miles of difficult country, from the west—from Baisun in Hissar, to graze in the grassy valley of the mountain-locked Hing-ab river.

The section of the Surkhab basin which is occupied exclusively by Karateghin is 100 miles in length from Kchi or Little Karamuk, as distinguished from Katta or Great Karamuk on the eastern side of the passes—where the river emerges from a gorge,—down to the mouth of its affluent the Ab-i-Gharm. On the north this little province is bounded by a range of mountains uniting at its eastern extremity with the Alai Mountains, or, as Fedchenko called them, the South Kokand range. This range forms the water-parting of the Jaxartes and Kizyl-su or Surkhab river systems.

At the eastern extremity of the Zarafshan glacier we find a mountain knot which has been called Kok-su* by the Russian Baron Aminof. Three ranges radiate from this knot—the one just alluded to, another called the Turkistan range, separating the Zarafshan from the Jaxartes, and the third called the Hissar range, which separates the Surkhab valley from the basin of the Zarafshan. Baron Aminof gives a height of from 18,000 to 19,000 feet to this Kok-su mountain knot, but it has not yet been seen by any European, nor has the eastern spur between the knot and Karamuk been crossed by a Russian explorer. Mr. Fedchenko in his endeavour to ascend the Kara-Kazuk Pass was deterred by terrifying stories of robbers told to him by a Kokand Yuzbashi, who professed an anxiety for his safety. And Mr. Oshanin, who visited Karateghin in 1878, was to his great disappointment prevented from ascending the Alaudin Pass from the south, a difficult pass which occurs to the west of the Kara-Kazuk. There is according to Mr. Oshanin an intervening

* Oshanin objects to this as an impossible name for an elevation, the meaning is "earthy water."

secondary range of mountains immediately overhanging the valley of the Surkhab, which extends from a peak called Shumkara between the Kok-su affluent of the Kizyl-su and the head of the Zanku tributary of the Surkhab. This range extends to the western confines of Karateghin, where it is said to break up into ramifications parting the Ab-i-Gharm river from that of Kafirnihan. This range is pierced by the three largest tributaries of the Karateghin river, rushing southwards from the main range; the minor affluents of the Surkhab having their sources in the southern declivities of the secondary range.

On the south Karateghin is bounded by a range called Peter I., in honour of the Russian Tsar who gave Russians the "key to the gateway of Asia." This range, averaging in height some 14,000 or 15,000 feet, extends from a group of gigantic peaks at the sources of the Muk-su river, called Shilbelli,* Sandal, and Muz-jilga, to the western confine of Karateghin.

Karateghin is locked by mountains at both its eastern and western extremities, and the road into this valley from both ends, instead of passing up or down the banks of the river, leads over numerous passes of considerable altitude. Perhaps the two easiest points of ingress from the north are at Gurumdu in the east and Pakshif in the west—the one accessible from Ferghana, the other from the valley of the Zarafshan.

The valley of the Muk tributary of the Surkhab is a deep and gloomy defile; and the same may be said of the Surkhab from Karamuk to the mouth of the Muk. The valley of the Surkhab consists of a series of hollows or expansions, closed in by projecting spurs of mountains on both sides of the river, therefore the single road through Karateghin presents many of the same forms of ingress, and each hollow is as it were a little Karateghin in itself. We have been taught to believe that in order to traverse Karateghin and Darwaz, one has to crawl and scramble up and down the rocky mountains and along the edges of precipices, and that in order to get to the opposite sides of yawning chasms one has to swing from basket to basket, transferring oneself bodily and with the greatest agility to the opposite brink. But this is not the fact, and one need not be an acrobat to travel in those regions. This fable arose from exaggerated and distorted accounts of the very frail and swaying bridges or balconies of a primitive kind which are here and there patched up to facilitate traffic. Although the roads are none of the easiest, it is nevertheless found that men in detachments of thirties, fifties, and even hundreds, can stream through the country without let or hindrance.

These hollows or expansions in the Karateghin valley are very remarkable, appearing at some remote period to have been a series of

* We find Shilbelli in Abdul Mujid's itinerary, but I cannot make out how he passed that locality when travelling southwards through the Karateghin valley to Gharm.

lakes, for on the terraced clayey sides there is ample evidence of a high-water level. There are three bridges over the Surkhab, at Divana and Dombrachi near the mouth of the Muk, and one at Pul-i-Sengi * at the western confine. There is no boat on the water, and if a man has any business to transact on the opposite side he must swim across by the aid of a *gupsar*, or inflated cow's-hide. The only place of note is Gharm, the capital, which contains only about 100 dwellings, and has no bazaar.

Every patch of ground suitable for cultivation is turned to account by the native Tadjiks with the greatest care and assiduity. He ascends with his oxen to a great elevation to till and to sow. From off every available patch of soil he gathers a harvest of wheat and barley, exporting most of the grain to Ferghana and finding nourishment for himself principally in the mulberry, which he dries and converts into a paste. But he also indulges in other fruits, such as the peach, the apricot, the cherry, the apple, the pear, and the quince. Wild berries and fruits are likewise in great abundance in the mountains of Karateghin. The walnut grows there, but the fig and the pomegranate do not favour those high latitudes. The population of Karateghin is roughly computed at about 10,000.

The eastern extremity of Karateghin down to the Zan-ku tributary is occupied by the nomad Kara-Kirghiz, who have been gradually driven up farther and farther into the mountains by the Tadjiks. Who these Tadjiks are is a matter of highly interesting speculation. Some say they are of the original Aryan stock; they themselves boast of being only the descendants of the hosts led into Asia by the great Iskander. If the Garden of Eden was indeed in this corner of the globe, then the nature of the country must have been something very different from what it is now, and the climate must have been tempered by a vast ocean extending to the very base of that stupendous elevation known to us as the Bam-i-Dunia. I will not venture to say more on this point but I would observe, in reference to the common belief among the Tadjiks in their descent from the remnant of Alexander's followers, that while it may be discredited as applying to the bulk of the people, it is not improbable that the headmen or hereditary governors of the people may have been descended from some of the captains of the great conqueror's cohorts. And it may be that in course of time, through the fusion of the multiplying families of the chiefs with the native race, every individual as he ranked himself under his lord's banner adopted the belief that he sprang from a race of heroes. Most men of eminence or note throughout Central Asia pretend to trace their pedigree from the great Macedonian conqueror.

The Tadjik or Burgess is totally distinct from the Uzbeg Tartar. He has straight, fine black hair, and sunken eyes, black and lively, and a straight nose. The beautiful Roxana, who together with her father

* Where Colonel Yule at last found the long-lost bridge.

was taken captive by the Macedonian conqueror, was probably of the Tadjik race.

According to Strabo, Arrian, and other Greek historians, Roxana was a Bactrian maid, a daughter of the Bactrian chief Oxyartes, who defended that impregnable rock which appears to have been Derbend in ancient Sogdiana. The Tadjiks may therefore be descendants of the ancient Bactrians, who were routed and dispersed by Alexander's armies. Bactria, to a large extent depopulated, being subsequently made a place of banishment.

Darwaz is entered on the west in two ways, by a road leading up the Panj from Zikhar below the mouth of the Kofau or Kufau to Kila-Khumb, and by way of the Khulas or Hing-ab and the Saghri-Dasht valley and pass. There is no road along the Panj below Zikhar.

The valleys of Darwaz are those of the river called by Dr. Regel Wakhia-Bala above, the Khulas in its mid course, and the Wakish towards its mouth; * of the Khumbou, Wanj, Yaz-Ghulam, and others. From the south we observe that the Panj within the Darwaz territories is said to receive a very considerable affluent in the Kofau, flowing through Shiva in northern Badakhshan a course of some 100 miles. This is an interesting but not quite a novel feature, although we have not observed it on any map since the year 1826, when that river seems to have been traced on Waddington's map attached to Erskine's and Leyden's *Memoirs of Baber*. This river on Waddington's map is made to fall into the Panj, where we now find Kof; but Waddington confounded it apparently with the Faizabad river—the Kokcha, and the Kokcha again with the Kunduz river. Thus while Waddington left out one river, we have since reconciled the omission with known facts by bringing his Kokcha down south to serve as the real one. It would appear then, from this, that the Kofau is a re-discovery.

General Walker traces a very remarkable Shiva river about 100 miles in length due north and falling into the Panj opposite to Kila-Khumb, the capital or citadel of Darwaz; but M—S— (the Indian native gentleman already alluded to) does not say a word about the matter. Dr. Regel's map in the 'Proceedings' for March 1884, looks very much like a modification of General Walker's in this respect; and one is naturally curious to know whether Dr. Regel consulted Waddington's map in drawing up his "croquis," for, as I have just said, we do not find any trace of this river in any of our maps since the year 1826.

True, it is still found on Burnes' map by Arrowsmith, 1834, as a result of Elphinstone's mission to Cabul. There is a suspicion of it again in Wood's original work on the Oxus, and on Moorcroft's map, where it is called Shiva, but we have ignored it since, although Burnes and Moorcroft appear to have ascertained the existence of the Shiva river for themselves; and even Humboldt in 1843, and Ritter in 1852,

* Mr. Arendarenko says that this river bears the single name of Hing-ab.

relying on English authorities of those later periods, left that river entirely out of their calculations.

The largest valley in Darwaz is that of the river which we have been recently told is called the Hing-ab. The length of this river is said to be about 167 miles; if so, its sources would lie east of the head-waters of the Muk, in the direction of Kara-Kul Lake. This valley has not been explored, but it has been crossed at Childara and at Tavildara, where the river is bridged. The valley lies between Peter the First Mountains and the Darwaz* range. Before reaching the Surkhab this river forces a passage through a gorge, through which the road is not always practicable. In the Khulas or Childara section of the valley there is a smiling prospect, and every appearance of prosperity; vast meadows carpeted with the most succulent grasses; human habitations sprinkled about in the shade of luxuriant orchards yielding luscious fruits. The scene here is one of pleasant animation and of happy contentment. The laborious Tadjik is either garnering his grain or enjoying in his loved orchard the repose he has so well earned after the terrible hardships of a long and severe winter, when he was out for weeks hunting in the mountains to procure a quarry for a high festival. His long-haired goats stray over the hill-sides, and below in the alluvial pastures are the numerous shepherds with their immense flocks. From the pass at Tavildara is a view of the whole length of the lower part of the valley, and all around is a grand panorama of gigantic mountains patched with everlasting snows, with here and there a beetling elevation, and far away in the east, closing the valley in the dim distance, the shadows of leviathan peaks, with a glimpse here and there of the glittering edge of a glacier, whose great bulk is hidden in some gloomy recess of the mountains.

The next well-to-do valley, isolated like all the rest, is that of the Saghri-Dasht, affluent of the Hing-ab. It must be passed through and climbed down into on the way to Kila-Khumb, where we are in the valley of the great Panj, or main head-branch of the mighty Oxus, or Jaihun of the ancients, the Amu-Daria of the Russians and Central Asiatics. Kila-Khumb is the residence of the Bek of Darwaz. The possession of Kila-Khumb was ever an apple of discord between the former native shahs of those regions. The citadel stands on an elevation commanding the river; there is no crossing the Panj here, except by swimming with the *gupsaar*.

The valley of the Panj is hemmed in by rocky mountain sides, and there is said to be but little cultivable land along its banks, though habitations are scattered about, nestling in those orchards which are the Tadjik's only delight.

We now come to the Wanj, a river whose sources are to be sought in the western declivities of the Bam-i-Dunia. This river was ascended by

* So called by the Oshanin expedition in 1878.

some of Dr. Regel's companions in 1882, but communications, though suspected, were not established as a fact between the upper valley of this river and the valley of the Hing-ab, nor has the correctness been ascertained of Captain Trotter's surmise that there are tracks leading up to the Wanj valley from Shughnan, flanking Darwaz on the north-east. This in Mr. Oshanin's opinion, is most likely to be the case; and seeing the curve described here by the Panj river, according to Dr. Regel, and the difficulty of following the road along the river, Captain Trotter was probably justified in his conclusions.

At the mouth of the Yaz-Ghulam and at Varv, we reach the south-eastern limits of Darwaz. Varv, where M—S—, as well as the Havildar before him, was stopped, is placed by both those native agents exactly opposite to the mouth of the Yaz-Ghulam tributary of the Panj. Here is the mouth of that gorge which severs all communication along the Panj between Darwaz and Roshan, or, in other words, through which alone Darwaz communicates with Shughnan—Roshan being an integral part of Shughnan and appertaining to the Amir of Afghanistan.

There are no two opinions as to the position of Varv. M—S— ascended as far as Varv and then came down the Panj to Varv, supplying the "missing link."

On Dr. Regel's map, where we find a most eccentric loop of the Panj, which considerably lengthens the river and the distance between Kila Wamar and the mouth of the Vanj, the Yaz-Ghulam mouth is pushed high up and Varv is elbowed far into the Shughnan and Badakhshan territories of Afghanistan, as a possession of the Amir of Bokhara. I have just heard that another batch of papers has been received at St. Petersburg from Dr. Regel, who is now again exploring the regions of the Upper Oxus, so that we may expect something of great interest in the course of a month or so.

Another point of difference between General Walker's latest map up to 1881 and that of the Russian surveyors is the re-conversion of the Pamir river, the Ak-su, into a head-water of the great Murghab. M—S—, ascending the Murghab to Seres, found there that he had reached the very source of the Murghab, and that beyond Seres towards the east rose an obstructing ridge of mountains with a pass. I quite expect that Captain Trotter's projection in this respect also will be fully confirmed by the Russian surveyors.

Even yet no one attempting a description of this part of Central Asia should omit some reference to the apocryphal geography exposed some twenty years ago by Colonel Yule, the late Lord Strangford, and Sir Henry Rawlinson; but I dare not venture so far beyond my depth as to do more than allude to it, referring all who are interested in this matter to Sir Henry Rawlinson's 'Monograph on the Oxus' and Colonel Yule's paper in the 'Journal of the Royal Geographical Society' for 1872, and to his introduction to the new edition of Wood's 'Oxus.'

In introducing the author of the paper,

The PRESIDENT said that Mr. Michell, although an Englishman by family and nationality, was born in Russia and had lived a great part of his life there. He had travelled a good deal through that country, and had kept himself acquainted with the progress of geographical discovery in Russian Asia. The subject of the paper was a country that up to the last six years had never been explored by Europeans. It was the cradle of the human race, and from there the great Aryan race from which Englishmen were descended issued forth.

After the paper,

Sir HENRY RAWLINSON said the subject for discussion was a very large one, inasmuch as it included the physical as well as the political geography of a tract extending over some 400 or 500 square miles. The districts of Darwaz and Karateghin, which formed the subject of Mr. Michell's paper, had been described as a sort of "Debateable Land" between the Aryan and Turanian nations. There was no sharp line of demarcation separating the two nationalities, for the aborigines, or indigenous peasantry, even to the east of Darwaz and Karateghin, were of the Aryan race, while the dominant tribes throughout were Turkish; but in a general way it might be said that the region between the Surkháb (or Wakhsh) and the Oxus was the barrier which divided the settled Aryan cultivators from the Turanian nomades.

And through this region, which was the "Vallis Comedarum" of Ptolemy, passed the great trade route which extended in antiquity from the Mediterranean to China. Ptolemy, it was well known, following Marinus of Tyre, had traced this route in some detail from Syria, through Western Asia, to Bactra or Balkh, in a general direction of east and west, but at the last-named place he carried the line northward, ascending the western slopes of the Mountains of the Comedæ to the famous "Stone Tower," where the caravans assembled before descending on the other side into the great desert, which extended from that point to the confines of China. Geographers had disagreed as to the exact line by which Ptolemy had carried the route across the mountains from the valley of the Oxus to the Central Asian depression, but if we consulted history and applied the lights which it furnished to the physical geography of the country, we should, he thought, be satisfied that the true trade route was up the valley of the Surkháb, and then along the northern skirts of the Pamir to the Terek Pass, the "Stone Tower" being probably at Uzkend or at some point in the basin of the Jaxartes.* The best proof of this was that the lower part of the valley of the Surkháb retained the name of *Kumid* down to comparatively modern times; it appeared under that name (Chinese *Kiu-mi-tho*) in the travels of the famous Buddhist pilgrim Hwang-tsang in the seventh century, and again some centuries later in the geography of Ibn Dust. During all this period also it formed the high road of transit from the valley of the Jaxartes to that of the Oxus. So exclusively indeed was it used for this purpose, that in order to arrest the immigration of the Turkish nomades, Fadhl Ibn Yahya, the Barmecide vizier of Harún Ar-Rashid, erected in the ninth century of Christ a strong fortress at Rasht, in the vicinity of Garm, the capital of Karateghin, so as to dominate the passage along the valley.† The ambassadors of Shah Rukh, on their return from China to Herat,

* Gen. Cunningham first identified the Comedæ of Ptolemy with the *Kiu-mi-tho* of the Chinese, and Col. Yule has approved of the identification, but supposes the valley to have extended along the Panj through Darwaz as far as Roshan. There is, however, no practicable road, at any rate no high road, in this direction. It is only along the valley of the Jaxartes that a convenient passage is found from the Surkháb valley to the eastward.

† Ibn Khurdád-beh, the Postmaster, is the first authority for this statement, and he was followed by Edrisi and Yacút, and by Ibn Saïd, who states that the fort was named

followed the same route; and it was repeatedly mentioned in the memoirs of Baber as the best road through the mountains from the Jaxartes to the Oxus.* But there were also two other routes from west to east by which the Pamir could be crossed. The one led up the valley of the Ghand river from Shignán by Alichur and Riáng-kul direct to Kashgar, forming the line of retreat by which the Badakhshan forces sought to escape from Shah Rukh's attack in A.D. 808, as related by Hafiz Abrú; and it was along the same line that the Chinese forces from Kashgar pursued the Khojas on their rapid flight to Badakhshan in the middle of the last century.† The third route across the Pamir was the southern line leading to Yarkand by Wakhan and Sarik-kul or Tash-Kurghán, and well known to geographers from the travels of Marco Polo and Benedict Goetz, and more recently from the surveys of Lieutenant Wood and the officers who accompanied Sir Douglas Forsyth's mission to Turkistan.

He would now give a brief explanation of the names of Karateghin and Darwaz. The title of Karateghin, applying to the valley of the Surkháb, was first met with, as far as he was aware, in the account of the wars of the Emir Timúr, and he presumed that it was taken from the name of some local governor; ‡ while Darwaz, which in Persian meant "The Gate," was the specific name given to Fadhl's fort which guarded the entrance to the country from the north. How it happened that the name of a fortress situated to the west of the Wakhsh-ab should have been made to apply to a wide extent of mountainous country stretching at least 100 miles to the east of that river was not very easy of explanation, but the fact was undoubted. The name indeed seemed to have migrated to the eastward as early as the time of Timúr, for the Dereh Darwaz mentioned in the wars of that sovereign as the abode of Shah Jelaledin, who refused an asylum to the rebel Prince Mireké when expelled from

El Báb, "the Gate." See Reinaud's *Abulfeda*, Int. p. 161. Ibn Athir merely states under A.H. 178 that Fadhl built several mosques and *robáts* during his government of Mawerennahr, but does not particularise Rasht.

* See Leyden's *Baber*, pp. 68, 125, 127, &c.

† Major Trotter (*Report*, p. 279) says:—"The desert road to Kashgar (from Badakhshan) up the Ghand valley is said to be a much easier road than that by Tash-kurghán." Hafiz Abrú's account of the retreat from Badakhshan by the Ruby Mines, Shignán, and the Ghand valley to Pamir, was copied into the famous *Matla'a-es-Sa'adin*, and translated by Quatremère. See *Not. et Ext. des Mau.*, tom. xiv. p. 223. It is quite possible that Hwang-tsang may have followed the same route, *Ta-mo-si-l'ie-ti* being Shignán rather than Vakhan and *Ko-pan-t'o* (or *Khavandha*) being the true form of Ghand. This would explain the mention of the "Dragon Lake," or Kara-kul, otherwise entirely off the line. Observe also that *Ta-mo-si-l'ie-ti* has the alternative Chinese name of *Chin-kan* and that *Ko-pan-t'o* is explained in *Dictionary* as *Arachul*, i.e. Alichur (Pamir). What is wanted to confirm this identification is the discovery of Buddhist remains at the upper end of the Ghand valley. Ghand is also the *Ghanda-mis* of Ibn Fakhri, the source of the river Jyhún. See Yacút in voce Jyhún. Major Trotter, (in Forsyth's *Report*, p. 457) gives a detailed account of this road across the Pamir (Route XXVII.), which I have compared with an ancient Chinese Itinerary, preserved by Klaproth, in a recent number of the 'Geographical Journal.' It is, I may add, quite possible that the old trade route by the "Vallis Comedarum" crossed the Pamir plateau by the line of the Ghand river, in which case the "Stone Tower" would be represented by *Tash-bálik*, "Stone town," where there are said to be extensive ruins.

‡ *Hist. de Timur*, tom. p. 174. The Prince Kai Khusru, of Khotlan, is said to have fled to Alai by the way of Cair Tekin. There were many chiefs of this name under the Samanides and early Seljukians. The best known died at Bost in A.H. 317, and was buried in the Robot Kara-tegin at Isfijáb. He was for some time governor of the country between Chaghanian and Ferghanah, and probably bequeathed his name to the province.

Khutlán (Kulab) was almost certainly the modern Kileh Khumb, the country being thus shown to have been ruled by semi-independent chiefs as early as the fourteenth century.* It was curious also to observe in the most recent Russian map, that the name of Mount Darwaz applied to the hills between Ab-i-Garm and the Wakhsh-ab, where "the Gate" of Fadhl the Barmecide was originally built; and seemed to be quite independent of the province of Darwaz to the east.

Another name which had given rise to much confusion in the geography of this region was that of Panj or Panja, the former being probably the correct orthography. The word meant "five," and was popularly supposed to refer to the five streams which formed the Upper Oxus, the main stream being known by that designation as far down as the junction of the Kokcha, or river of Badakhshan. The identification of these five streams however was quite uncertain. The early geographers Istakhri and his copyist Ibn Haukal mentioned, it is true, five streams which united with the Wakhsh-ab to form the Jyhún or Oxus, and which they named the Khari-ab, the Andija-rágh, the Farghán, the Barban, and the Hulbuk or Akhshwa; and it was in deference probably to this tradition that later local writers, like Hafiz Abru, repeated a statement to the effect that "In the neighbourhood of Khotlan and Wakhsh, five large streams unite, on which account the place is called Panj-ab," but Istakhri's authority in this matter was really of the least possible weight. He confounded, in the first place, the Khari-ab or river of Badakhshan (modern Kokcha) with the Panj or Wakháb, the true Oxus, and he further mistook the two arms of the Panj, which bifurcates below Simti, for two distinct and independent streams. It was in fact pretty certain that he had laid down his five rivers from a sketch of the high road leading from Badakhshan to Hulbuk, the capital of Khotl, namely two stages from the ford of the river to Rustak on the Andija-ragh; one stage by Chai-ab to Farghan on the left loop of the Panj; one stage to Barban on the right loop about Sayat; and one stage more to Hulbuk, a place which still preserves its name, a few miles to the south of Kulab.† But it was quite possible that the

* The Shah Jelal-ed-din, who is mentioned in this passage of the 'History of Timur' (tom. ii. p. 12), seems to have been a local and semi-independent chief, who guarded the Tibet frontier, and the title of Shah is retained to the present day by the native family which holds Darwaz under the Bokhara Government. There is not, however, any special defile now recognized as the Dereh Darwaz, though the name is often used by Colonel Gardiner in his apocryphal travels. The name of Kileh Khumb, which applies to the residence of the chief on the river, is said by the Russians to be derived from a certain colossal "jar," or *khumb*, which formerly existed on the spot. The same story is told of the pass of *Khumb-ah*, on the road between Herat and Sarakhs, and is probably of great antiquity, for in the Zoroastrian Cosmogony one of the seven immortal lords of *Khuniras* is named *Khumbya*, because he was brought up in a *khumb*, or "jar." Bundehis, Chap. xxix. s. 5.

† It is quite certain that Istakhri had no acquaintance with the bend of the Oxus between the mouth of the Kokcha and Wakhán, but believed the river which joined the Wakhsh-ab above Termid to be the true trunk-stream which rose in Tibet and came down through the valley of Vakhan. He thus repeatedly says—and he is implicitly followed by Ibn Haukal—that Badakhshan was on the *Khari-ab* (if that is the true form of the name), and he calls the passage of the Khari-ab "the ford of Badakhshan." He further describes Khutl as between the Wakhsh-ab and the Khari-ab, and says that he includes Khotl in Mawer-en-nahr, because it was beyond (i. e. to the north of) the Khari-ab, which was the true Jyhún. With this clue then, we can understand his classification of the five rivers. The Khari-ab or Kokcha was No. 1. The next river, or No. 2, was the Rustak stream, joining the Panj at Yungi-kileh, and this he calls Andija-rágh, from the district of Rágh in which it rose. Mokadassi states that there was a town of Andija-rágh on the Oxus, which should thus be at or near the modern Yangi-kileh. Rustak

name of Panjab was not originally intended to designate any particular number of subsidiary streams, but merely to indicate in a general way the numerous affluents which formed the great river; for the celebrated Biruni had left it on record that the Upper Oxus was known to the Zoroastrians as the region of the "Seven Rivers" (thus recalling to mind the Hapta Hindu of the Vendidad), from the multitude of its tributary streams.* Major Trotter, who tested the local traditions on the spot, was in doubt whether the name of Panj was derived from the five small inclosures constituting the group of villages called Kiléh Panj at the junction of the two upper Wakhán streams, or whether the true form was not rather *Panjeh*, the river taking its name from a rude but conspicuous sculpture in the vicinity representing the hand of Hazrat Ali (*Panjeh*), and greatly venerated by the Wakhánis.† Sir Henry added that in his own view the name of Panj really referred to the five head-streams of the Oxus, which he recapitulated as (a) the two streams of Wakhán, namely, that issuing from Wood's Lake and the Sirhad river; (b) the two streams which formed the Suchán, namely, the Shakh-dereh river to the south, and the Ghand river to the north; and (c) the Bartang or Murghabi river, which, as far as length and size were concerned, had every claim to be regarded as the trunk stream of the Oxus.‡

There were still some further points to be noticed with regard to Darwaz. Mr. Michell had referred to the traditionary descent of the chiefs of Darwaz from Alexander, and there were really certain arguments in favour of such a connection. Firstly, the stronghold of the chief, or Kileh Khumb, which still retained the local name of the *Zindan Iskender*, or "Alexander's fortress," appeared in the early geographers as Secandereh, the site being identified by the description that it was the only town in Khotl included in the mountains; and it was further not a little curious to observe that the district conterminous with Darwaz on the east was also

probably represents Istakhri's *Rustab-Bang*, so called from the chief who founded it (see De Goeje's Istakhri, p. 277, note c). No. 3 must be the left loop of the Panj. Istakhri calls it Farghan, from a town of that name on its banks lower down. Ibn Dust mentions this town, which he calls Barghan, and assigns to Upper Tokharistan, as it was south of the Panj, his Wakhab and the true Oxus. It was probably the same as the Chinese Po-li-ho (Farigha) which Cunningham compares with the ruined Barbara of Wood near the confluence of the Kokcha. No. 4, the Barban or right loop of the Panj, is a new discovery, and nothing is known of the name, but No. 5 will represent the lesser Surkhab or Hulbuk river of the Arabs, the upper source of which is now called Ak-su, answering to the Akhshwa of Istakhri. The name of Hulbuk, or Albak, has now disappeared from the Russian map, but is well known in the country.

* See Elliot's 'Historians of India,' edit. Dowson, vol. i. p. 49.

† See Trotter's Report, p. 275. The open hand of Ali, called *Panjeh* from the five fingers, is one of the holiest emblems of the Shias.

‡ It appears that in the popular belief at Kabul, the name of Panj was supposed to apply to the affluents of the middle Oxus, and especially to the Talikán streams which form the Ak-serai and join the great river from the left below the confluence of the Wakhsh, and that the idea of these internal streams forming the territorial limit of Afghanistan caused some consternation. The name of Panj, however, has never applied in history to the Talikán streams. The main river, now called Ak-serai, is known in Arab Geography (see Ibn Dust, Akhbar el Baldan, and Yacút) as the *Dharghám*,

ضرغام Greek *Δαρρυγάνης*, while the head-streams, the Bangi and Talikán, are named respectively the *Jabál-áb* and *Utar-áb*, the orthography however being doubtful. See the extract from Ibn Dust in Geograph. Mag. for 1875, p. 338. The Tokharistan rivers have been since identified and their orthography corrected from a passage in Mokadassi not before noticed.

named Roshán, which was the exact Oriental rendering of the Greek Ῥοδάνη, Alexander's favourite wife, who was here captured; and that this was not a modern name was proved by a passage in Masudi (about A.D. 930), where Roshán was joined with Khotlán as one of the earliest settlements of the Turks in this part of Asia.* Alexander was known to have crossed the Oxus at Termid, and to have taken up position in the first instance at Nautaca ("new town," as opposed to Kumduz, or "old town"), which was probably in Khotl, from whence he may very well have led the attack on Oxyartes, attracted by the proverbial beauty of the inhabitants of the district.

Sir Henry could not undertake on that occasion to discuss the comparative geography of the whole region described by Mr. Michell, but he might assist future enquirers by pointing out a few of the most important identifications. The Greek name of the Oxus was taken, no doubt, from the Wakhsh, which was the best known of the two great arms of the river, and it was worth noticing that this name of Wakhsh appertained in the upper portion of that river, not to the right or Alai branch, which was considered by the Russians to be the trunk stream, but to the left branch, which rose in the Fedchenko Glacier, and which, besides the name of Wakhsh, seemed to bear the other titles of Vakhia, Hing-ab, and Khullias, the right branch being alone known, as far as the junction, by the name of the "Red River," *Kizil-su* in Turkish, *Surkh-áb* in Persian. The Wakhsh-áb was stated by Ibn Dust to rise in the upper country of the Kharlokh Turks, to pass in succession through the regions of Famir, of Rasht, and of Kumid, till it reached the gorge between Washjird to the west and Tamliyat to the east, where it was crossed by the famous "stone bridge," and ultimately joined the Jyhún at Míleh above Termid. Tamliyat, which was four farsakhs to the east of the stone bridge, was named *Termestat* in the earliest authority, Ibn Khordad-beh, and was thus almost certainly the original of the *Ta-mo-si-t'ie-ti* of the Chinese, though the name, like that of Darwaz, seems to have had a wide application, and in the Buddhist pilgrim's account to have denoted the region south of the Panj between Khotl and Shignán.† The Wakhsh-áb below the "stone bridge," which had

* In the 'Prairies d'Or' (French edit. tom. i. p. 207) we find, "Among the descendants of Amúr were the *Khotto*, who colonised Khotlán and Roshán, and the people of Oarushneh and Sughd, between Samarcand and Bokhara, and the people of Ferghánch and Shash, and Isfjáb and the country of Faráb." There is a complete ethnical confusion in this notice, but it bears witness at any rate to the antiquity of the name of Roshán.

† *Ta-mo-si-t'ie-ti* is supposed by Colonel Yule to represent the valley of Wakhán, and if the Buddhist pilgrim crossed the Pamir by the lower road leading to Tash-Kurghan, this identification would seem to be established; but how then can we explain that the Oxus affluent coming out of the Dragon Lake (or Kara-kul) joined the great river on the eastern frontiers of *Ta-mo-si-t'ie-ti*? See 'Vie et Voyages, &c.', p. 272. If the theory be accepted that Ko-pa-to is Ghand, and that Hwang-Tsang crossed the Pamir by the high road up the valley of that river, then we must suppose that *Ta-mo-si-t'ie-ti* included all cis-Oxus Darwaz, together with part of the modern Shignán; and here it may be observed that there is a clear distinction in the Arab geographers between Shikiniyeh and Shignán. The former is always mentioned (by Istakhri and his followers) with Kurán and Wakhán as the extreme frontier district of Badakhshan towards Tibet and may thus very well answer to the Shi-ki-ni of the Chinese; but the Shignán of Ibn Khordad-beh and Biruni is apparently a different place, Iahkshem being the principal town of the district. Hwang-Tsang may have passed from Kurán, the upper valley of the Kokcha across the mountains, north of Fyzabad, to *Ta-mo-si-t'ie-ti* (perhaps the basin of the newly discovered Kof-au), then along the Shewa Pamir to Bar-panj, and passing the Panj, up the line of the Suchán and Ghand to the head of the valley, where Buddhist remains ought to be looked for. Biruni mentions some other places on the Panj below Shignán, namely the ruby mines, *Sad-ján* and *Jeláwa*. *Sad-ján*

been visited and described by the Russians, passed, firstly, by the ruins of Kurghan Teppeh (representing the Halawerd of the Arabs, which was the capital of Wakhsb, and known probably to the Greeks as Ἀλιχόβρα, and in Puranic geography as Ilavritta), and lower down washed the ruins of Lakman which was the Lavkend or Lamkend of Istakhri and his followers.* He might further note that although the name had disappeared from the most recent Russian map, the old Arab capital of Hulbuk (now corrupted to Albak) was clearly marked by the first Russian explorers one short stage to the south of Kulab; and in the immediate vicinity of this place must be sought the tomb of Syud Ali Hamadáni, which for many centuries was the most famous place of pilgrimage in the Oxus region, though unvisited, he believed, since Sidi Ali's journey some hundred years ago.†

Before concluding, Sir Henry wished to say a word on the political question. Politics as an independent subject were, it was well known, excluded from discussion at the meetings of the Royal Geographical Society, but it frequently happened that they could not be dissociated from geography. On many occasions, indeed, and the present was a case in point, the political element was the most important subject of consideration. If it were not, for instance, that the districts which Mr. Michell had described divided the Russian from the British dependencies, and in the course of a few years probably would form a close and connecting link between the two empires, the Upper Oxus and its tributaries would be comparatively of little interest. Under present circumstances they were, however, of considerable importance, as he would proceed briefly to describe. The Fellows of the Society were probably aware that in 1872-3 an understanding was arrived at between the British and the Russian Governments with regard to the northern frontiers of Afghanistan. The district of Badakhshan, to the north of the great range, had at that time been only recently united to Kabul by Dost Mahomed Khan, and Russia hesitated at first to acknowledge it as an Afghan dependency. Ultimately, however, in 1873, the point was conceded, and Badakhshan and Wakhan were admitted by the two Governments to form a portion of Shih Ali's patrimonial territory. The frontiers of these districts were not discussed—in fact, such frontiers were not at the time at all accurately known; but it was assumed in a general way, that the Oxus was the limitary line between the Afghan districts to the south, and the Bokhara or Kirghiz territory to the north. Later exploration had shown, however, that this was altogether a wrong assumption.

is unknown otherwise in geography, but may represent the stronghold of *Sirojan*, in the hills above Wamar, which is still used as a place of refuge by the rulers of Roshán and Shignán, and *Jeláwa* may possibly be the original of Gulab or Kolab, the forms being nearly similar.

* These cities on the Wakhsb-ab were ruined probably before the time of Timur, since their names do not occur in the accounts of his wars in this region. Kolab seems to be the place named by his historian Ghuleo (tom. i. p. 63), and Baljewan, which is still a considerable place, is first mentioned at this period. It answers apparently to the settlement of the Mong (who are the same as the Nogais) which is placed by Istakhri at two days from Hulbuk, and two days from the "Stone Bridge." Kolab is stated in the Haft Aklim to have a very strong fortified castle, but it is unknown by whom the castle was built.

† Sidi Ali gives the name of Dilli to the village where he found the tomb of the famous saint, a pilgrimage to which was the main object of his journey from Constantinople. The Haft Aklim records that Sidi Ali of Hamadan, who died at Kabul in A.H. 776, during the reign of Oljaitú Khan, was buried in Khutlan in the vicinity of Kulab, though why such a remote and inaccessible spot should have been selected as his place of sepulture is nowhere explained. Sidi Ali's travels, which contain much geographical information, were translated and published in the 'Journal Asiatique,' Ire Ser. tom. ix. p. 204 sqq.

The ancestral rights of the Badakhshanis were found to extend far beyond the river along the whole line from Wood's Lake to Yaz Gholam on the Darwaz frontier, while the claims of the Bokharians to an almost equal extent of territory south of the river stretching from Roshan to Kulab, were also shown to have been admitted from time immemorial. It was raising a false issue to suppose, as generally stated in the press, that the present dispute between the British and Russian Governments merely referred to the dependency of the Trans-Oxus portion of Shignan and Roshan. If these districts, which formed an integral part of Badakhshan, were to be evacuated by the Afghan troops in deference to the supposed obligations of the agreement of 1872-3, then the Government of the Amir would require to be compensated by the restoration of the Cis-Oxus districts, hitherto forming part of the Begship of Darwaz; but in real truth no such complication had arisen and no forcible exchange of territory was required. The international understanding above referred to provided that Badakhshan should be recognised as an Afghan possession, and all that remained for present execution was to define by means of a joint commission what the true geographical limits of that possession were. The Bartang or Murghabi, the Ghand and the Shakh-dereh valleys, peopled by Shignanis, were undoubtedly parts of Badakhshan; but the uplands beyond, forming the outskirts of the Pamir Plateau, might very well be left in the occupation of independent Kirghiz, and the frontiers between Uzbek and Afghan jurisdiction would be thus defined, as Dr. Regel, the Russian traveller, had already suggested, by the watershed between the Wenj and Wamar valleys. There was some disagreement, Sir Henry added, between the results of Dr. Regel's exploration of the line of the Oxus from Darwaz to Wamar, and the surveys recently executed by an employé of General Walker's. According to the last named authority the river flowed in a general direction of west and east, as previously stated by the native explorers of the Indian Topographical Department, but in the recently executed Russian map a great bend to the south was here laid down which completely changed the geographical character of the region. He would leave this point to be argued between General Walker and the Russian authorities. All that he desired to say was that he felt sure English geographers were ready to admit they were under extensive obligations to Russian officers for the great progress that had been recently made in delineating the physical features of the Pamir plateau. The country was not yet triangulated with the precision which had been arrived at by the Indian Survey to the south of the great range; but the Russian astronomical observations had been connected with Major Trotter's work at Lake Victoria, and the general map of the country from the Jaxartes valley to the Kashmir frontier might thus be regarded as completed.

The PRESIDENT said the district referred to had been explored under the orders of General Walker, the late Surveyor-General. That gentleman was not present, but he had entrusted Major Holdich with the statement that he would have been prepared to make.

Major T. H. HOLDICH, R.E., read the statement as follows:

Note on Discrepancies between Russian Surveyors and the Indian Explorer
M—S—.

IN the account of the Russian Pamir Expedition of 1883, of which a translation from the *Izvestia* of the Russian Geographical Society is given in the March number of the 'Proceedings' of the Royal Geographical Society, some considerable discrepancies are pointed out between the surveys of M—S—, a native of India, employed as a geographical explorer in connection with the operations of the Indian Survey Department, and the recent surveys of Russian officers.

The principal discrepancy is in the delineation of the upper sources of the

Murghabi-Bartang river which enters the Panjah near Kila Wámar. M—S— makes this river rise in the Sarez Pamir, contrary to the long accepted belief that it is a continuation of the Aksu river, which rises far to the south in the Oikul lake, circles round the southern Pamirs, and then becomes the Murghabi-Bartang river.

It appears that in September 1880, M—S— was residing near Kila Wámar, and being known as a great physician, was requested by a man of the Bartang Valley to accompany him to Sarez and attend a person who was seriously ill. He proceeded up the valley to Sonab Tashkurgan, where the Murghabi receives a stream coming from the north through a valley called the Pasár Dara, which is probably identical with the Russian Kudara; from this point he proceeded along the Murghabi river to Sarez, which he calls the last inhabited place in Bartang. He believed that the sources of the river lay in the hills hard by at the head of the valley, and that he had reached the vicinity of the water-parting, as implied by the words Sar-rez. His map was compiled under the superintendence of Colonel Tanner, by whom, as well as by myself, he was closely questioned regarding the Aksu river; he declared most positively that he had not come across that river, but believed it lay to the south of his route; his field-book, which had been kept in great detail, was carefully scrutinised to ascertain whether it indicated the junction of any stream from the south which he might have forgotten, but it did not do so. His survey placed the Murghabi considerably to the north of the position assigned it on previous maps, and thus left ample space for the Aksu to find its way to the Panja without entering the Murghabi river. At the time, he was the only explorer who was known to have traversed the Bartang-Murghabi valley and reached Sarez; his rendering was therefore accepted for the next edition of the Turkistan map, though not without some misgivings.

Last year a Russian officer, Captain Putiati, accompanied by the topographer Bendersky, followed the course of the Aksu down to Sarez, and found that the river merges into the Murghabi, thus showing that M—S— must have been mistaken.

I would therefore take the present opportunity to state that in scarcely a single instance has it been found possible to employ a trained native surveyor in making explorations beyond the British frontier. The natives in the service of the Indian Survey Department could not venture into these distant regions without great risk of detection, which would probably result in their murder, or at least grievous ill-treatment. All the most successful explorers have been men specially selected for the purpose, who resided on the frontiers, and had the right of travelling into the regions beyond as traders, physicians, pilgrims, or religious teachers. M—S— was a Pir of notable sanctity, who resided in Kashmir; he had visited the regions of the Upper Oxus in previous years, and was about to revisit them, when he heard that he might be accepted as an employé of the Survey Department. He offered his services to me, and I accepted them; he was trained for some weeks in the Survey Office at Dehra Dun, and after he had been taught as much about surveying as he could take in, he started off on a tour of pilgrimage and discipular visitations combined with geographical reconnaissance. He acquired much useful information, very little of which has as yet been permitted to be published; but of course his geography has always to be accepted with some reservation, and is of very little weight as compared with the work of a trained surveyor, whether Russian or of any other nationality. I have, therefore, no hesitation in concluding that the Russian topographers are right and he is wrong as regards the merging of the Aksu into the Murghabi.

But as regards another discrepancy between his map and the recent Russian map of the Pamir, I side with him and believe his work to be the more reliable. Dr. Regel gives a vast bend to the Panja river in its course immediately below Kila

Wámar; M— S— here makes the course almost direct, and it so happens that his work is corroborated by the Havildar's explorations made several years previously. The *Javestia* remarks that Dr. Regel's maps must be accepted with great caution since he is no surveyor. Here, then, I think that the survey of the Indian Pir is to be accepted in preference to that of the Russian physician.

There is one more discrepancy which is of much importance. Dr. Regel represents the Shiva lake as having an area of fully 100 square miles, and thus exceeding in magnitude all the Pamir lakes, with the exception of the Great Karakul. M— S— shows a Shiva lake of very small size—2000 paces long by 250 broad are the dimensions given in his field-book. But Dr. Regel had heard of a great lake, and he made a journey with the express object of visiting it; and though he may have unintentionally exaggerated its magnitude, he must surely have come across a great lake. In Wood's 'Oxus' the Shiva lake is mentioned as of considerable magnitude. On the other hand, M— S— was travelling by the most direct route across Badakhshan, from the Ragh Valley over the Khoja Parwa Pass to Kila Bar Panja, without any thought of exploring the Shiva Pamir and visiting the entire lake region; he came across a little lake which appears to lie considerably to the south-east of the great lake discovered by Dr. Regel; and as there appears to be ample room for both lakes, it is but reasonable to suppose that both Dr. Regel and M— S— are in this instance correct in their respective renderings.

Sir LEPEL H. GRIFFIN said he had been connected with the districts described in the paper in a diplomatic way. The late war in Afghanistan had to a great extent changed the position of England with reference to the Amir of that country, and the determination of the northern boundary of Afghanistan was a matter of pressing importance. When he first met the Amir in the autumn of 1880, on the part of the British Government, and delivered to him a memorandum which was practically a treaty of obligation on both sides, the point to which the Amir attached most importance, and about which he expressed the greatest doubt, was the definition of the northern boundary, so as to prevent any future cause of dispute between him and his great neighbour to the north. The difficulty which the Amir then foresaw had now arisen both on the Herat border and on the border which Mr. Michell had described in his paper. The districts in dispute between the Amir of Afghanistan and Bokhara were districts which the Amir certainly considered to be included in Afghanistan—Shignan, Roshan, and Wakhan. He (Sir Lepel Griffin) agreed with what Sir Henry Rawlinson had said with reference to the question of the boundary of Badakhshan. It was a small matter whether one branch of the Oxus or the other were taken as the northern boundary; the real point was that the Russian Government had agreed to Badakhshan and Wakhan being included in Afghanistan, and this inclusion was not affected by their geographical position with reference to the Oxus. He had no doubt that considering the importance of these districts the English Government would take a similar view. Those wild and isolated regions, with a very sparse population and yielding no revenue, might appear to many Englishmen to be of little political importance, but from a strategical point of view they were of great importance, seeing that they commanded some of the easiest passes leading into India. He hoped that the British Government would uphold his friend, the Amir of Afghanistan, in the possession of all territory which could be proved to have belonged to Afghanistan.

The PRESIDENT, in proposing a vote of thanks to Mr. Michell for his interesting paper, said it was always a matter of surprise to him when a man was able so completely to realise the descriptions of geographers as to write such a paper. Still they had heard Sir Henry Rawlinson talk of these regions as if he had been familiar with them from his youthful days. Colonel Yule also had described coun-

tries which he had never seen, and received the gold medal for travels that he had never made in the body. The discussion had been chiefly interesting as throwing light upon a district of great importance. For the reasons mentioned by Sir Henry Rawlinson and Sir Lepel Griffin, it was desirable to the last degree that Englishmen should exactly understand the merits of the case. Lord Clarendon, followed by Lord Granville, took infinite pains to come to an understanding with Russia in order that a large district in the nature of a buffer might be interposed between England and Russia. At that time Badakhshan was accepted as a portion of Afghanistan, and the only question now was how much of the territory belonged to Badakhshan and how much to Karateghin and Bokhara. Although these countries have been tributaries to Bokhara they were now in a happy state of independence. No doubt the actual ruler of Bokhara would still claim some influence over them, but all lovers of peace would, undoubtedly, wish the barriers between England and Russia as strong as possible, especially when they learnt that the people occupying the region which had been described enjoyed so much prosperity since they had escaped from the rule of Bokhara. He was sure that every one present would in future read their newspapers with greater interest from having enjoyed the benefit of hearing the opinions of such great living authorities as Sir Henry Rawlinson and Sir Lepel Griffin.

Additional Note on Darwaz. By Major-Gen. Sir H. C. RAWLINSON,
K.C.B., &c.

THE exact positioning of Rasht, which being regarded as the extreme limit of early Mahomedan empire, and the barrier post against the invasion of the nomades, was a place of much importance, has always been a subject of great interest to geographers. With regard to the general geography of the district there can be no difficulty, as Istakhri and Ibn Haukal, in defining the eastern frontier of Mawer-en-nahar, name in succession the liminary regions of Famir (Pamir), Rasht, and Khotl (or Kulab), while they place along the southern borders of the province of Osrushneh, Kesh, Saghanian,* Shuman, Washjird, and Rasht, thus clearly identifying the district of Rasht with southern Karateghin; but what we really want to know is where the strong fort was situated, which is said to have been built by the famous Fadhl the Barmecide, in about A.D. 796, to curb the invasion of the Barbarians, and which was called indifferently El Kil'eh, "the fort," and El Báb, "the gate." We may dismiss as fable the idea of a fort actually blocking the way between two hills and thus barring the passage of the tribes. The same story was told of the famous "Iron Gates" of Kahlugah, and of the still more celebrated Bab-el-Abwab, or "Gate of Gates" in the pass of Dariel, or Vladicavcás. All that was probably meant was a strong position dominating the surrounding country, and thus guarding the entrance along the north to the rich valleys along the middle Oxus and its tributaries. Now the early Arab travellers who stereotyped the geography of these regions, have left on record an itinerary of the road from Termid on the Oxus, to the extreme point of El Kil'eh or Rasht, which ought to enable us to fix the position with tolerable certainty.† There were some twelve stages from one point to the

* The Arabs having no palatal in their alphabet wrote Saghanian for the Chaghanian of the Persians. In Timour's History (tom. i. p. 183) the town is named Jagana (for Chaghana) and the river Jagan-rud. Its distinction from Hissar is well marked. See *Hist. de Timour*, tom. i. p. 35.

† There are discrepancies between the itineraries as preserved by Ibn Khurdad-beh, Istakhri, Ibn Haukal, and Edrisi, but they are of no great extent, and ought not to

other, the large stations of Chaghanian and Washjird occurring at nearly equidistant intervals, and thus dividing the line into three sections, of about 100 miles each. Our maps of this region, derived from Russian sources, are not yet sufficiently accurate to enable us to verify these distances in detail, but we can hardly err in placing Chaghanian, the name of which seems to be now lost, on the Kafir-nihan river, perhaps at the ruins marked in the latest map as Tash Kileh. Shuman, which intervened between Chaghanian and Washjird, was probably at Hissar, the name having been varied to Shadmán to suit a pretended etymology, and Washjird itself must have been on the Ilek river, hardly as far east as Fyzabad, which seems to be not more than 10 miles from the famous stone bridge over the Wakhsah-áb,

vitiating our measurements on the map. Practically, however, we find the distance between Termid at the mouth of the Surkhan, and Chaghanian on the Kafir-nihan, to be on the map nearly the same as that between Chaghanian and Garm,—that is, the first section of the itinerary measures on the map as much as the second and third sections united, which seems to show that there must be some important error either in the map or the itinerary, or in the identification of the intermediate sites. The name of Chaghanian, which was four or five stages from Termid, is now entirely lost, but it cannot have been further south on the line of the Kafir-nihan river than the ruins of Tash-kileh since it was passed by Sidi Ali on his route from the Stone Bridge, one stage to the east of Deh-náú. All the authorities are agreed that Chaghanian represents the Chi-go-yen-na of Hwang-Tsang, but in the further explanation of the Buddhist list there is great uncertainty. Yule suggests that Ho-lu-mo is Garm, but this is quite impossible. Holumo is evidently the *Ahrus* of history which, for the two first centuries of Islam, was always associated with Shumán, but the name of which was lost before the time of Istakhri. It was probably near the place marked as Katanvan on the map. Shumán itself was almost certainly Hissar, which name first appears in history in the wars of Timur, the epithet of *Shadmán* (or “the happy”), which then applied to it, being a corruption of the old name. The next Buddhist name is Kio-ho-yen-na = Kuvayan. This is immediately to the east of Shumán, the list evidently following the high road from Termid to Khotl, and it can hardly therefore represent Kobadian, 100 miles to the south, as proposed by Colonel Yule. I should prefer *Kufiyán*, the king of which state, according to Beladheri, came and did homage to Koteibeh on the first Mahomedan invasion, together with the kings of *Ahrun* and *Shumán*. The position was probably about *Washjird* or Fyzabad, but the name is unknown in geography. The next two names, Hu-sha and Kho-tu-lo, represent, of course, Wakhsah and Khotl; and the more celebrated name of Houou on the Oxus to the south, where Hwang-Tsang, on his return from India, visited the great Khan's son in his hunting encampment, is to be traced probably in the *Uvej* or *Ubej* of geography, now corrupted to *Aivej* and applied to the Kobadian ferry, the final *j* in this name being a mere dialectic termination. A few words may be added in explanation of Ibn Dust's geography of this region. In the first place, he appears to confound the upper waters of the Surkhan and Kafir-nihan rivers, uniting all the streams which flow from the mountains south of the Zar-afshan valley, called Botm, Sinam (or Siyam), where Mokanna, the veiled prophet, had his fort, Niham, and Khawer, into one bed, under

the name of *Rámíd* (رامید for رامل of the MS.). This corrected form of Ramid may be compared with the name of Rumid still applying to the upper valley of the Kafir-nihan (Meyendorf applies the exact name of Ramid to the high mountain above Garm). Ibn Dust then names the several arms of the Ramid, as the Kam-rud (the Hissar defile mentioned by Baber), the Niham-rud (present Kafir-nihan), and the Khawer-rud, which must apparently be the Ilek, though the name does not elsewhere occur in the notices of the geographers.

but in the immediate vicinity.* The last section of the route from Termid between Washjird and Rasht, undoubtedly followed the line of the Ilek river up to the watershed between this stream and the Ab-i-Garm, thus traversing the whole extent of the steppe called Dasht-i-Bidan by M. Oshanin, and here accordingly, or in some of the lateral valleys to the east, must be sought the site of Fadhl's famous fortress.† The hills, it must be observed, which divide the high plateau of the Dasht-i-Bidan from the Wakhsh-áb are still called Mount Darwaz, though with no immediate reference to the district of Darwaz, east of the great river; and the name of the Ilek, which is one of the head-streams of the Kafir-nihan, is preserved not only by Istakhri, who connects it with Washjird, but also by Baber (page 127), who mentions his having followed the Ilek in one of his marches through the hills from Ferghanah to Hissar. Apparently in all time the best route from the north-east followed down the Wakhsh-áb as far as the mouth of the Ab-i-Garm, and then crossed to the Kafir-nihan valley by the steppe called the Dasht-i-Bidan, the highest point of which gave rise to the Ilek flowing south, and to the Ab-i-Garm flowing north. Oshanin was five days travelling from Fyzabad by this route to Garm, the capital of Karateghin, which nearly agrees with Istakhri's stages between Washjird and Rasht, but I still hesitate to fix the exact site of Fadhl's fort pending a more careful examination of the country.

Seven Years' Travels in the Region East of Lake Nyassa.

By Rev. W. P. JOHNSON.

(Read at the Evening Meeting, June 23rd, 1884.)

Map, p. 550.

THE country of which I have to speak seems naturally to divide itself into three parts: the country north of the Rovuma; that between the Rovuma, the Lujenda, and Nyassa; and, lastly, the country south-east of Nyassa, down to Quilimane.

It is impossible to reach the people without mastering the main features of the land, and commonly the features of the land are often

* Washjird was one stage or about 20 miles from the "Stone Bridge," and may therefore have been at the town of Kafir-nihan, the next stage to the east according to Istakhri being at Ilek, perhaps the modern Fyzabad. In Sidi Ali's time the next stage to the west after the "Stone Bridge" was Bazarand, and from here the road to Chaghanian was probably deflected to the south, leaving Hissar at some distance to the right.

† The following passage occurs in Mr. Delmar Morgan's paper recently published in the Supplementary Papers of the R.G.S., 1884, p. 229. "The watershed between the two rivers (Ilek and Ab-i-Garm) is imperceptible, the valley of Dasht-i-Bidan, where they rise, being a high steppe, such as are common in the highlands of Central Asia. . . . Ascending one of the head-streams of the Ilek (from Fyzabad) M. Oshanin found that after proceeding along the bank some distance the track left the water's edge, approaching it again after a while. No perceptible difference having been noticed in the level, he thought he was following the same river, and was surprised on observing later the water flowing in an opposite direction, proving that he had crossed the watershed between the basins of the Kafir-nihan and Surkhab, here undivided by the smallest eminence." Across this steppe then was the track pursued by the Kharlook and Taghazghaz nomades whom Fadhl sought to arrest, and somewhere within its limit must his famous fort of "the Gate" have been erected.