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ON ANCIENT TRACKS PAST THE PAMIRS

SIR AUREL STEIN

THE KINDLY invitation which my valued friend, the Editor of The Himalayan Journal, recently addressed to me has come at a time when response is made difficult by manifold tasks claiming my attention in the short interval between travel in my old Central Asian field and a fresh journey on very different ground. Since I cannot spare time for something more original and more directly related to the Himalayan Club's sphere of interests I propose to offer here a brief survey, a bird's-eye view as it were, of ancient mountain routes beyond the Hindukush. I became acquainted with different sections of them on successive Central-Asian expeditions and hence could discuss them only partially in separate publications long out of print and now difficult of access.

The sketch-map has been drawn by the Honorary Editor. For convenience, all Sir Aurel Stein's footnotes and references have been collected together at the end of his paper.

Note.—Oriental names and terms, other than Chinese, have been spelt in accordance with the system of phonetic transliteration approved by the International Congress of Orientalists, as was done in the case of the local names in my Maps of Chinese Turkestān and Kansu, published by the Survey of India, 1923. No use, however, has been made of discritical marks apart from length marks. Thus the transliteration agrees in essentials with the Hunterian system adopted for official use in India. In the transcription of Chinese names the Wade system has been followed.

It is true that none of these routes fall in a strict geographical sense within the Himalayan region. Nevertheless some special interest connected with the latter may be claimed for them; for they skirt or traverse that great 'Roof of the World', the Pāmīrs, which forms the northern buttress of the Hindukush range. They also aptly illustrate the important bearing which conditions created by history have had at all times upon the use of the mountain routes across that natural rampart of the Hindukush which protects India on the north-west.

If we look at the map it might well seem as if the mighty elevation of the Pāmīrs, with the high, rugged, meridional range forming its eastern rim, and with the vast drainageless basin of the Tārīm beyond it, had been intended by nature far more to serve as a barrier between the lands where flourished the great civilizations of ancient Asia, than to facilitate intercourse between them. Yet historical records which have come down to us both in the East and West show that through this remote belt of innermost Asia there led routes which for many centuries formed important channels for trade, travel and political enterprise between China on the one side and Iran and the Hellenized portion of Western Asia on the other.

I need not attempt here to describe the physical features of the Pāmīrs, those high plateau-like valleys drained mainly by the headwaters of the Oxus. The geographical aspects of those bleak uplands lying at elevations from about 11,000 to 14,000 feet and of the barren ranges dividing them have been analysed with masterly clearness by Lord Curzon(1). Before him Professor W. Geiger, that Nestor of Iranian studies, had furnished a very useful synopsis of the detailed information on the Pāmīrs as recorded by Russian explorers to whom most of the early geographical investigations are due(2).

Nor is there any need here to give a systematic account of the great meridional range which divides them from the Tārīm basin. It joins the T'ien-shan, the 'Celestial Mountains' of the Chinese, on the north, to the snowy Hindukush on the south and was known already to classical geographers by the name of Imaus(3). The imposing line of its great elevations, culminating in the ice-girt dome of Muz-tāgh-atā (24,385 feet) and in the still higher Kungur peaks rising to over 25,000 feet, has received due attention in the accounts of travellers, mainly British, who entered the Tārīm basin from India, ever since Sir Douglas Forsyth's Yārkand Mission. To the several routes leading across it I shall have occasion to refer further on.

The ancient lines of communication with which we are concerned, lead past or traverse the Pāmīrs in the direction from east to west. The trade and traffic which follows them nowadays is small and in parts may be called insignificant. But in ancient times they derived much importance from the fact that they formed the shortest connexion between the basins of the Tārīm and Oxus, both regions which then served as the natural 'corridors' for intercourse between China and Western Asia.

In my paper Innermost Asia: its Geography as a factor in History (4) I have fully explained the reasons which obliged the Chinese Empire, when, under the great Han Emperor Wu-ti in the last quarter of the second century B.C., it sought direct trade access to the civilized countries of the West, to secure it 'through-control' of the Tarim basin. Situated between the high mountain ranges of the Tien-shan in the north and the K'un-lun and Kara-koram in the south, this great basin offered distinct advantages for the 'peaceful penetration' aimed at. The great mountain ramparts protected it from the dangers of nomadic migrations and invasions. The strings of oases fringing the huge central desert of the Taklamakan in the north and south would permit caravan traffic to pass over ground where it was comparatively easy to protect it. To the south of the basin the utter barrenness of the high Tibetan plateaux makes such traffic physically impossible. In the north beyond the T'ienshan all routes from the side of China were exposed to attack by great nomadic tribes, like those of the Huns, Turks and Mongols.

In the west the Oxus basin with its great fertile territories of ancient Bactria and Sogdiana has always provided emporia for trade exchange. Bukhāra and Samarkand have retained this character down to modern times, and so did Balkh, the ancient capital of Bactria, until Chingiz Khān's Mongol invasion brought there devastation from which the land, the present Afghān Turkistān, has never fully recovered. Bactria lay nearest both to India and Persia and through the latter led the ancient trade-routes both to the Mediterranean and the Persian Gulf. These brief remarks will suffice to explain why the ancient routes to be described here had their main western terminus on Bactrian ground to the south of the middle Oxus.

It was chiefly the trade in silk which made direct access to the Oxus basin so important for China. Before and for centuries after the beginning of the Christian era, the production of silk was a jealously-guarded monopoly of China and its profitable export to

the 'Western Regions' was a great factor in the economic policy of the Empire. It is to this silk trade that we owe the early classical notice of the route followed by the caravans which proceeded from the Oxus to the land of the 'silk-weaving Seres', or China. It is to the northern of the two main routes with which we are concerned that the notice refers which Ptolemy, the geographer, has fortunately preserved for us from the account of a Macedonian trader whose agents had actually travelled along it. It led from Bactria, the present Balkh, past the northern rim of the Pāmīrs along the Alai valley, and thence down to Kashgar.

But before tracing its line it will be convenient to deal first with the other great natural thoroughfare which in the south leads up to the main headwaters of the Oxus. For this route lies close to the Hindukush and the passes by which valleys on the Indian side can be gained. Another reason is that our records about the early use of this route are more ample. In this case, too, we may start from the west and thus keep company with those early travellers who have left us the fullest account of this southern route.

Only the briefest reference need be made here to the ground over which the valley of the uppermost Oxus separating the Hindukush from the Pāmīrs is approached. A look at the map will suffice to show that the easiest and most direct approach to it from the side of Balkh and the rest of Afghān Turkistān must always have led through the fertile main portion of Badakhshān, formed by the valley of the Kokcha, or Vardoj river. Badakhshān, a territory favoured by its climate and provided with plenty of arable ground in its valleys and rich grazing-grounds on its mountains, formed part of ancient Bactria which, after its conquest in the first century B.c. by the Tokhari, a branch of the Indo-Scythians or Great Yüeh-chi, was known as Tokharistān down to the early Middle Ages.

It is under the Chinese transliteration of the name Tu-huo-lo that Hsüan-tsang, the great Chinese Buddhist pilgrim, mentions the several petty chiefships, including Badakhshān, through which he passed on his way back from India in a.d. 642 towards the Tārīm basin and China. The description which Hsüan-tsang gives in his famous 'Memoirs of the Western Countries' (5) of the territory next entered to the east leaves no doubt about its being identical with the present Wakhān. This comprises the valley of the Ab-i-Panja, or uppermost Oxus, right up from the river's sharp northward bend to its sources on the Afghān Pāmīrs. Hsüan-tsang makes no exact reference to the route by which he entered the territory. But

considering the configuration of the ground this could be no other than the one still regularly used which leads from Zebak in the uppermost Vardoj valley across an easy saddle into the village tract of Ishkāshm close to the bend of the Oxus.

More than a century before Hsüan-tsang's passage the route through Wakhān had been followed in A.D. 519 by two other Chinese pilgrims, Sung Yün and Hui-shêng, on their way from China with an Imperial mission to the Hephthalite or White Hun ruler of Kābul, and the north-west of India. Their narrative shows that, after reaching the uppermost Vardoj valley above Zebak, they made their way across the Hindukush, probably by the Mandal pass into the Bāshgol valley of Kāfiristān, and thence down to Swāt and the Peshawar valley(6). It is similarly from the head of the Vardoj valley that Chitrāl is reached across the Dōrāh pass. This route provides the most direct and easiest approach to Indian territory from the side of Badakhshān and the Russian territories on the right bank of the Orns

Sung Yün and Hui-shêng's narratives agree in quite correctly describing Wakhān, or Po-ho as they transcribe its name, as a country "extremely cold; caves are dug out for quarters. As winds and snow are intense men and beasts huddle together. On the southern border of this kingdom there are great snowy mountains [i.e., the Hindukush]; the snow melts on them in the morning and freezes again at night. From afar they look like peaks of Jade". How closely this description corresponds to characteristic features still observed in Wakhān is shown by the accounts of modern travellers (7).

The importance of Wakhān for traffic towards the Tārīm basin lies in the fact that it provides a line of communication unbroken by any serious natural obstacle for a distance of close on 200 miles right up to the watershed towards the drainage area of the Tārīm. Though the valley of the Oxus is narrow at its bottom it is singularly free from defiles except at the upper end of the sub-division of Ishkāshm in the west and again above Sarhad, at present its highest village eastwards. Those two defiles, too, are short and practicable at all seasons for laden animals. Limited as the agricultural resources must always have been, yet the food supplies of Wakhān, supplemented by the flocks for which the side valleys afford ample grazing, are likely to have been always sufficient to meet the needs of traders and travellers following the route along the valley.

Permanent habitations are to be found on it now up to Sarhad and in earlier times existed also for two marches further up, as far as

Langar(8). Thus shelter was assured all along for those using the route, an important consideration in view of the elevation at which the inhabited portion of the valley lies (from about 8000 feet at Ishkāshm to 10,500 feet at Sarhad) and the rigours of the climate during the greater part of the year. For the conditions of life and cultivation in Wakhān I must refer to the modern accounts already quoted(8). The present population of Wakhān, divided since the Anglo-Russian Boundary Commission of 1895 into a Russian portion on the right and an Afghān portion on the left bank of the Āb-i-Panja, can scarcely much exceed a total of about 5000 souls. But that it must have been considerably greater in pre-Muhammadan times is proved by the number and extent of the ancient strongholds I was able to survey on my passage down the main portion of the valley in 1915(10).

Hsüan-tsang's description of Wakhān which the Imperial Annals of the T'ang dynasty reproduce with some additions about its history(11), brings out clearly the great length of the territory in contrast to the narrowness of the habitable ground. It mentions wheat and pulse as the main crops; the hardiness of the local ponies; the icy winds. The dependence of the territory on the Tukhāra country, i.e., Badakhshān, which has continued to modern times, is duly referred to. Of the people we are told that they were "of a violent and coarse disposition". The pilgrim's observation: "for the most part they have greenish-blue eyes and thereby differ from other people" is completely borne out by the physical character of the present Wakhīs. They have preserved the Homo Alpinus type of the Galchas or 'hillmen' of the Oxus region in remarkable purity, and blue or light-grey eyes and fair hair are very common among them(12).

Hsüan-tsang mentions ten Buddhist convents, each with a small number of monks, and refers to the capital of the territory by a name (Hun-t'o-to). This clearly places it at the present Khandut, situated on the left bank of the river and with its 50-60 homesteads the largest village of Wakhān. It is the track leading along the left bank which travellers on their way through Wakhān are likely to have ordinarily followed; for by keeping to it, those coming from or proceeding to the Pāmīrs could avoid crossing the Ab-i-Panja at any point lower than Langar-kisht whence, after its junction with the stream from the Great Pāmīr, its bed becomes more confined and deeper.

After Hsüan-tsang's journey more than six centuries pass before we meet again with a traveller's account of Wakhān. We owe it

to Marco Polo, the greatest of medieval travellers, who about 1272-3 followed this route on his way to the Pāmīrs and thence to Khotan and China. "In leaving Badashan", so the great Venetian's immortal narrative tells us, "you ride twelve days between east and north-east, ascending a river that runs through land belonging to a brother of the Prince of Badashan, and containing a good many towns and villages and scattered habitations. The people are Muhammadans and valiant in war. At the end of those twelve days you come to a province of no great size, extending, indeed, no more than three days' journey in any direction, and this is called Vokhan. The people worship Mahommet, and they have a peculiar language. They are gallant soldiers, and they have a chief called None, which is as much as to say Count, and they are liegemen of the Prince of Badashan" (13).

It has been long ago recognized by Sir Henry Yule that "the river along which Marco travels from Badakhshan is no doubt the upper stream of the Oxus, known locally as the Panja... It is true that the river is reached from Badakhshān proper by ascending another river (the Vardoj) and crossing the Pass of Ishkashm, but in the brief style of our narrative we must expect such condensation". For the twelve days' journey which the Venetian records between Badakhshan and 'Vokhan' it is easy to account, I believe, by assuming that here, as in similar cases, the distance from capital to capital is meant; for the distance from Bahārak, the old Badakhshān capital on the Vardoj, to Kala Panja, the seat of the old chiefs of Wakhan and nowadays of the administration on the Afghan side of the river, is still reckoned at twelve marches. Marco Polo was right, too, in his reference to the peculiar language of Wakhan; for while Persian is spoken in Badakhshān, the Wakhi, spoken by the people of Wakhān, is a distinct language belonging to the Galcha branch of Eastern Iranian. The small size ascribed to the province of 'Vokhan', " extending no more than three days' journey in any direction", is still more readily understood if the portion of the valley about Ishkashm together with Zebak formed then, as it had done down to recent times, a separate small chiefship. It may in Marco Polo's time have been ruled over by a 'brother of the Prince of Badashan' (14).

Before following Hsüan-tsang and Marco Polo further to the Great Pāmīr across which their journey led it will be convenient to trace the route to the source of the Oxus and thence across the Wakhjīr pass down the Tāghdum-bāsh Pāmīr to Sarīkol. We have no old traveller's account describing this route, but it offers distinct

advantages for caravan traffic and is regularly followed nowadays by traders proceeding from Chinese Turkistān to Chitrāl, or to Badakhshān. From Sarhad upwards I got to know it in 1906 on my second expedition and beyond the Wakhjīr pass I have become familiar with it on no less than four journeys. The Tāghdum-bāsh Pāmīr forms now the only approach by which travellers from India crossing the Hindukush can gain the Tārīm basin without touching either Afghān or Russian ground. In the same way the Tāghdum-bāsh together with the Afghān portion of the Āb-i-Panja valley has served, ever since the Pāmīr Boundary Commission's work in 1895, as a buffer between the territories of British India and Russia.

From Langar-kisht where a Russian post guards the junction of the Ab-i-Panja with that of the Great Pamir branch of the river, two easy marches past a succession of small settlements bring the traveller to the group of hamlets collectively known as Sarhad on the right bank of the river. Together with detached holdings on the opposite side they form at present the highest place of permanent occupation on the Ab-i-Panja. Sarhad is a point of some strategic importance, for opposite to it there debouches the open valley which leads at a distance of only some eight miles up to the broad saddle known as the Dasht-i-Baroghil. Lying at an elevation of only about 12,500 feet this easy saddle, which could readily be made practicable for wheeled vehicles, forms the lowest depression on the whole Hindukush range as far west as the passes north of Kābul. From the head of the Yarkhun, or Mastūj river, on the south side of the Baroghil, routes lead down the river to Chitral or directly southwards across the glacier pass of the Darkot into the valley of Yasin and thus through Gilgit to the Indus.

The importance of this low crossing of the Hindukush was illustrated by an interesting historical event. In Serindia and in a separate paper(15) I have had occasion fully to discuss the remarkable expedition by which Kao Hsien-chih, 'Deputy Protector of the Four Garrisons', commanding the Chinese troops in the Tārīm basin, in A.D. 747 led a force of 10,000 men from Kashgar across the Pāmīrs to the Oxus. The object was to oust the Tibetans who had joined hands there with the Arabs in Tokhāristān and in alliance with them were threatening the Chinese hold on the Tārīm basin. There is no need to set forth here the details of the great exploit by which the Chinese general, in the face of formidable physical obstacles, brought his troops across the inhospitable Pāmīrs and then, after signally defeating

the Tibetans where they barred his approach from the Āb-i-Panja to the Barōghil, led a portion of his victorious force across the glacier pass of the Darkōt (c. 15,400 feet above sea-level) down into Yāsīn and Gilgit. It was an achievement fully equal to, if not greater than, the great alpine feats of commanders famous in European history. Here it will suffice to mention only the points directly bearing on the topography of the routes with which we are concerned.

The biography of Kao Hsien-chih, contained in the dynastic Annals of the T'ang and translated by that great Sinologue M. Chavannes(16), shows that before concentrating his troops in a place corresponding to Sarhad he had moved them in three columns from 'the military post of the Ts'ung-ling mountains', established at the present Tash-kurghan in Sarikol. The main force was led by himself across the Pamirs to 'the kingdom of the five Shih-ni', i.e., the present Shughnan on the Oxus below Wakhan. To the route probably followed I shall refer further on. Thence it was moved up the main Oxus valley to meet at Sarhad a column operating from the opposite direction down the headwaters of the Ab-i-Panja. A third column which joined them from the north must be supposed to have descended from the side of the Great Pāmīr. On my visit to this, I obtained information about a track as yet unexplored which leads up the Shor-jilga on the Afghan side and crosses thence the Nicholas range to Sarhad. It is clear that by bringing up his forces on convergent but wholly distinct lines and by obtaining a fresh base for his own column in Shughnan Kao Hsien-chih guarded against those difficulties of transport and supplies which would, then as now, make it physically impossible to move so large a body of men across the Pamirs.

The concentration having been effected on the appointed day Kao Hsien-chih led selected troops across the river. Though the month was August and the river in flood, the passage was effected without much difficulty. This is fully explained by the early hour of the morning at which, we are told, the crossing took place. Then the river's volume is reduced by the night's frost on the glaciers and snow-beds at the head of the Ab-i-Panja. It must be noted also that opposite to Sarhad the river spreads out its waters over a wide valley-bottom. On my visit to Sarhad in May, 1906, I ascertained that fording is always practicable provided the passage is made in the early morning.

The Tibetans were awaiting the attack at a point about three miles from the river where the valley contracts above the scattered

homesteads of Pitkhar. Their position which was defended with palisades was turned by Kao Hsien-chih who led his men up a precipitous rocky ridge on its western flank. This resulted in a complete defeat of the Tibetans who fled at night with a loss of 5000 killed, a thousand prisoners and "warlike stores and arms beyond counting". Pushing on at once after this victory, Kao Hsien-chih three days later gained the height of the Darkōt pass unopposed. Of the stratagem by which he succeeded in inducing his Chinese 'braves' to make the steep descent thence into Yāsīn an account has been given elsewhere.

Between Sarhad and the stage of Langar the valley contracts into a succession of defiles difficult for laden animals in the spring, when the winter route along the river bed is closed by the flood water, while impracticable soft snow still covers the high summer-track. All the same the route is never entirely closed here. Before reaching Langar I noticed marks of former cultivation in several places of the right bank, a point of some importance as proving that even here at an elevation of close on 12,000 feet travellers could at one time expect to find shelter. The remaining journey to the foot of the Wakhjir pass could readily be done in two marches leading over alluvial plateaux or along the wide river-bank, all easy ground used by Kirghiz camps for grazing.

At Bozai-gumbaz where we found a number of Kirghiz in their felt huts the route across the wide Little Pāmīr joins in. From here I visited Lake Chakmaktin near which lies, at a height of a little over 13,000 feet, the almost imperceptible watershed between the Ābi-Panja and the Ak-su or Murghāb, the other chief feeder of the Oxus. For nearly fifty miles the view extended unbroken over this perfectly open elevated valley to where the eye rested in the distance on the range, at the time still snow-covered, which overlooks the Tagharma plain of Sarīkol.

It is across the Little Pāmīr that Tāsh-kurghān can be gained by a route leading over the Naiza-tāsh pass, about 14,900 feet high. This is described as practicable at all seasons. But the distance to be covered on ground at a great elevation and without habitations is longer than on the route across the Wakhjīr and down the Tāghdumbāsh Pāmīr. Since Russian territory has to be crossed between the Little Pāmīr and the Naiza-tāsh pass this route is now no longer followed by traders. Other passes further north are more convenient for smugglers carrying opium from the Badakhshān side.

The track to the Wakhjīr pass branches off to the north-east from where the stream fed by a series of large glaciers to the south-east debouches into the head of the open valley. Higher up at an elevation of about 14,700 feet this stream forms the true source of the Oxus, as first clearly recognized by Lord Curzon. The ascent to the pass is not steep, as may be seen in the photographs taken by me(164), and the descent on the Tāghdum-bāsh side, which I examined on the 2nd July 1900, is still easier.

But while on that occasion the whole of the pass was clear of snow, it was only after great exertions on the 27th May 1906, that the watershed at an elevation of about 16,200 could be gained by us. The difficulty of getting our baggage across, first on yaks and then by load-carrying Wakhīs(17), was due solely to the soft condition of the snow. There had been an exceptionally heavy snow-fall all over the Pāmīrs that winter. As long as the snow remains hard the pass can be crossed with laden ponies, even in the spring, and it is certainly open to such traffic all through the rest of the year. Judging from what I saw of it in 1900 it would be practicable, too, for Kirghiz camels accustomed to the mountains.

Once across the Wakhjir the journey down the Tāghdum-bāsh Pāmīr is easy and can well be covered in five marches(18). Much of the first three of them lies past large ancient moraines which show the extent of the huge ice-stream which in a former glacial period descended the wide valley. At Kök-török there joins in from the south the route which leads across the main Muz-tāgh range from the side of Hunza by the Kilik pass (circ. 15,800 feet). On the north the Tāghdum-bāsh Pāmīr can be gained by the Kök-török pass from the side of the Little Pāmīr. Some 23 miles lower down there debouches the valley leading up to the Ming-taka pass which offers an alternative route towards Hunza and is regularly used for the British Consular Dak from Kāshgar to India. At Payik where there is a small Chinese Customs post, a well-known route is passed leading across to the Ak-su or Murghāb on the Russian side.

Some seven miles further down, the valley makes a marked turn to the north and there near Koshun-kör, at an elevation of about 12,600 feet, cultivation has been carried on until recent years by Wakhî settlers. The point deserves to be noted; for, together with what I have recorded above about former cultivation near Langar, it shows that for travellers from Sarīkol to Wakhān following the Wakhjīr route the distance where neither permanent habitations nor local supplies could be found was reduced about five or six

marches. It was an important consideration in favour of this old route, now again coming steadily into increased use by traders from the Yārkand side.

Only about three miles further down, there rise the ruins of an ancient stronghold, known as Kiz-kurghān, 'the Maiden's fort', on the top of a high and very steep rocky spur above the river's left bank. I have shown its identity with the place of which Hsüantsang relates a curious local legend how a Chinese princess on her way to be wedded to the king of Persia was detained there while the roads were blocked through war. Visited there by the sun god she became enceinte and from her the royal family of Sarīkol claimed descent(19).

Six miles down the valley we reach the fairly large village of Dafdār with fields of wheat and barley extending for some miles down the right bank. Scattered patches of cultivation are to be met also on the two short marches leading down to Tāsh-kurghān, the chief place of Sarīkol. That the once tilled area on this side of the valley must have been far more extensive in olden times is conclusively proved by the remains of an ancient canal, known as 'Farhād's canal', still clearly traceable from above Dafdār for a distance of over forty miles. It is also certain that the population of Sarīkol was greatly reduced in modern times in consequence of frequent raids of those plucky hillmen of Hunza whose depredations only ceased after the Pax Britannica was extended to Hunza in 1891.

There can be no doubt that Tash-kurghan marks the position of the ancient capital of Sarikol. With its rubble-built homesteads it clusters round a small plateau above the left bank of the river, occupied by the modern Chinese fort and the ruins of a small walled town. The territory is duly described by Hsüan-tsang under the name of Chieh p'an-t'o and is often mentioned in the Chinese Annals of T'ang times as well as by other travellers(20). Modest as the resources of Sarikol must always have been-for here, at an elevation of about 10,000 feet, the local saying holds that there are ten months of winter and two of summer-yet this 'post of the Ts'ung-ling mountains' has always been a welcome place of rest for caravans and individual travellers. Thus we know from the scanty narrative left of Benedict Goez, the observant lay Jesuit, who passed here in 1603 on his way from India and Kābul in search of fabled Cathay, that he and his large Kāfila of merchants from Badakhshān took a rest in the 'province of Sarcil', i.e., Sarīkol. In the looks of the scanty inhabitants of its hamlets he duly noted a resemblance to

Flemings. Among the Sarikolis, who are of the *Homo Alpinus* stock of the Galchas and who speak a language closely akin to that of Shughnan, blue eyes and fair hair are common enough.

Before I proceed to indicate the several routes through the meridional range to the east by which the plains of the Tārīm basin are gained from Sarīkol, we must return once more to the uppermost Ab-i-Panja and the ancient route which leads from there across the Great Pāmīr to Sarīkol. With it are associated the memories of those two great travellers, Hsüan-tsang and Marco Polo. The route starts from Langar-kisht where the Āb-i-Panja is joined by the river draining the Great Pāmīr lake, and ascends to the latter, just as Marco Polo tells us, in three marches north-eastwards. His description of the lake which Captain John Wood, who re-discovered it on his memorable journey of 1838, has named after Queen Victoria, is so accurate and graphic that I may well quote it in full(21).

"And when you leave this little country [Wakhān] and ride three days north-east, always among mountains, you get to such a height that 'tis said to be the highest place in the World! And when you have got to this height you find a great lake between two mountains, and out of it a fine river running through a plain clothed with the finest pasture in the world; insomuch that a lean beast there will fatten to your heart's content in ten days. There are numbers of all kinds of wild beasts; among others, wild sheep of great size, whose horns are good six palms in length. From these horns the shepherds make great bowls to eat from, and they use these horns also to enclose folds for their cattle at night. Messer Marco was told also that the wolves were numerous, and killed many of those wild sheep. Hence quantities of their horns and bones were found, and these were made into great heaps by the wayside, in order to guide travellers when snow was on the ground.

"The plain is called *Pamier*, and you ride across it for twelve days together, finding nothing but a desert without habitations or any green thing, so that travellers are obliged to carry with them whatever they have need of. The region is so lofty and cold that you do not see even any birds flying...."

Ever since Captain Wood's Journey to the Source of the River Oxus Ser Marco's narrative has been recognized, in the words of Sir Henry Yule, as the great Venetian's 'most splendid anticipations of modern exploration'. The sense of this being 'the highest place in the world' strangely impressed me also as I camped on the 27th August 1915, by the shore of the great lake (circ. 13,400 feet above

sea-level) after reaching it from the Alichur Pāmīr northward-Marco's 'wild sheep', the Ovis Poli justly named after him, still have favourite haunts in the range above the lake. On crossing it we came upon plenty of horns and bones of those which, driven down by the winter snow, had fallen victims to wolves. The excellence of the pasture was attested by big flocks of sheep then grazing in the side valleys, while Kirghiz reports told of bears and panthers being frequent.

Hsüan-tsang, too, has left us a graphic account of the 'valley of Po-mi-lo' and its 'great Dragon Lake' which he passed on his way from Wakhan to Sarikol(22). "It is situated among the snowy mountains. On this account the climate is cold, and the winds blow constantly. The snow falls in summer and spring time.... In the middle of the valley is a great Dragon Lake". As I looked across the deep-blue waters of the lake to where in the east they seemed to fade away on the horizon I thought it quite worthy to figure in the old traditional belief which the Chinese pilgrim's narrative reflects, as the legendary central lake from which the greatest rivers of Asia were supposed to take their rise. The clearness, fresh taste and darkblue colour of the lake are just as he describes them. It is the same with the masses of aquatic birds swarming about the lake in the spring and autumn, and with their eggs being found in plenty on its shores. Nor can it surprise us that the imagination of old travellers passing this great sheet of water at such a height and so far away from human habitations credited it with great depth and with hiding in it 'all kinds of aquatic monsters' such as Hsüan-tsang was told of.

There can be no doubt about Hsüan-tsang having travelled across the Great Pāmīr to Tāsh-kurghān. "On leaving the midst of this valley and going south-east, along the route, there are neither men nor villages. Ascending the mountains, traversing the sides of precipices, encountering nothing but ice and snow, and thus going 500 li, we arrive at the kingdom of Chien-p'an-t'o". The direction and distance indicated, corresponding roughly to five daily marches, make it appear very probable that the route followed by him was the one leading to the course of the Ak-su river and thence across the Naiza-tāsh pass. It is more difficult to make sure of the exact route followed by Marco Polo's party from Lake Victoria to the 'kingdom of Cascar'; for no exact indication is furnished for this part of the journey. From the fact that it took the travellers forty days through a wilderness without habitations it might be conjectured that they kept to the Pāmīrs north-eastward and then descended through the gorges of the Gez river to the plain south-west of Kāshgar.

Leaving aside the Great Pāmīr and the Alai in the north which, as we shall see, served the silk trade-route, there are two more valleys which traverse the area of the Pāmīrs from east to west draining into the Oxus. But only one of these can ever have been used throughout as a line of communication. It is the route of the Alichur Pāmīr leading past the Yeshil-köl lake and beyond its western extremity continued by the valley of the Ghūnd river in Shughnān. Along it leads the modern cart-road which connects the Russian fort of 'Pamirski Post' with the headquarters of the Russian 'Pamir Division' at Khōrok on the Oxus.

That this route has seen traffic since olden times is proved by what I have had already occasion to mention about Kao Hsien-chi's memorable expedition of A.D. 747. When he led his main force from the 'post of the Ts'ung-ling mountains' down to Shughnan he could not well have followed any other route but this. The same applies also to the itineraries, unfortunately very laconic, of two Buddhist pilgrims(23). One of them, Dharmachandra, an monk, wishing to return from China to his home land travelled A.D. 747 from Kashgar to the kingdom of 'Shih-ni', i.e., Shughnan, only to be forced by the disturbed condition of the region to retrace his steps to the Tarim basin where he died. The other pilgrim, Wu-k'ung, passed through Shughnan, both on his way to India from Kashgar in A.D. 752 and on his return thence to China about 786. On his way out we are told that he reached 'the five Shih-ni' across the Ts'ungling or 'Onion Mountains' and the valley of Po-mi (Pāmīr), i.e., from the side of Sarikol.

It was by this route along the Alichur Pāmīr that the Khōjas of Kāshgar, fleeing before the Chinese who had reconquered the Tārīm basin, endeavoured to reach Shughnān in 1759. By the eastern end of the Yeshil-köl they were overtaken by the pursuing troops and most of their followers killed in the fight. On my passage here in July, 1915, from the Sārēz Pāmīr I still saw at Sümetāsh the large stone pedestal of the inscription which had been set up by the Chinese in commemoration of their victory, the inscription having been removed by the Russians to the Museum at Tāshkend. It was close to the same spot that another tragedy took place in June, 1892, when Colonel Yonoff's Cossacks on the way to annex Shughnān wiped out the small Afghān detachment which bravely held out to the last in a post guarding the route.

The valley of the Ak-su or Murghab which lies to the north and contains the Sarez Pāmīr could never have served as a line of

communication; for from where the valley passes into the mountain territory of Rōshān it turns into a succession of very narrow gorges in which such tracks as exist are extremely difficult even for men on foot and quite impracticable for animals. In ascending in August, 1915, from Saunāb on the Rōshān side I found no water where the bed of the Murghāb had lain; for the great earthquake of February, 1911, had completely blocked the valley higher up by enormous masses of rock brought down in a landslide and had converted a great portion of the former Sārēz Pāmīr into a big winding lake.

We must now turn back to Sarīkol in order to sketch briefly the several routes by which thence the great western oases of the Tārim basin can be gained. The shortest and most natural would lie along the course of the river coming from the Taghdum-bash and draining Sarikol. But this soon after breaking through the meridional range in a sharp bend below Tash-kurghan passes, for a great distance down to its junction with the Zarafshan or Yarkand river, through an almost continuous succession of deep-cut gorges very difficult even on foot and quite impracticable for laden transport, except during the short period of the winter while the river is hard frozen and its ice can be used as a passage. Already early in June, 1906, before the summer flood from the melting glaciers and snow beds had come down, my experienced travel companion, Surveyor Rai Rām Singh, of the Survey of India, an excellent mountaineer, found it very difficult to make his way down as far as the point where the stream of the Tangi-tar valley joins the river from the north. But it was then still possible for me for a shorter distance to follow the river with laden transport down to the mouth of the Shindi defile and then, by ascending this to its head on the Chichiklik plateau, to avoid the much steeper ascent to this over the Kök-moinak pass above Tagharma.

Over the Chichiklik plateau leads the regular caravan route to Sarīkol both from Kāshgar and Yārkand, and here we find ourselves on ground for which interesting old accounts are available. The plateau known as the Chichiklik Maidān, lying at an elevation from about 14,500 to 14,800 feet, is situated between two great mountain spurs radiating southward from the Muz-tāgh-atā massif. Its position is such that it must be passed by all travelling from Sarīkol to the south of that great glacier-clad massif towards Yārkand and Kāshgar by whichever of the several passes they may traverse the more easterly of those spurs. The Chichiklik Maidān, owing to its great height and still more to its position exposed to bitter winds and heavy snowfall, is very trying ground for travellers at most seasons of the year.

And to the troubles here often encountered by travellers we owe the interesting accounts which Hsüan-tsang and Benedict Goëz have left us of their experiences on the Chichiklik plateau at an interval of nearly a thousand years.

The narrative of the great Chinese pilgrim tells us that starting from the capital of Chieh-p'an-t'o, i.e. Tāsh-kurghān, he reached an ancient hospice after travelling for two hundred li (or two daily marches) across "mountains and along precipices" (24). The distance and the bearing alone would suffice to indicate that the two marches leading from the Tāghdum-bāsh river up the Dershat gorge to the Chichiklik Maidān are meant. The position of the hospice is described as a level space of about a thousand Chinese acres "in the midst of the four mountains belonging to the eastern chain of the Ts'ung-ling mountains".

"In this region, both during summer and winter, there fall down piles of snow; the cold winds and icy storms rage. The ground, impregnated with salt, produces no crops, there are no trees and nothing but wretched herbs. Even at the time of the great heat the wind and snow continue. Scarcely have travellers entered this area when they find themselves surrounded by vapours and clouds. Merchant caravans, in coming and going, suffer severely in these difficult and dangerous spots". According to an 'old story' Hsüantsang heard, a great troop of merchants, with thousands of followers and camels, had once perished here by wind and snow. A saintly person of Chieh-p'an-t'o was said to have collected all the precious objects left behind by the doomed caravan and with their help to have constructed on the spot a hospice, provided it with ample stores and to have made pious endowments in neighbouring territories for the benefit of travellers.

On my first passage across the Chichiklik, on the 4th June 1906, I was able to locate the old hospice to which Hsüan-tsang's story relates and which probably he saw already in ruins(25). At the head of the Shindī valley through which my approach then lay—on my third and fourth expeditions I reached the Chichiklik Maidān by the very troublesome ascent in the Dershat gorge—there extends an almost level plain, about two and a half miles from north to south, and over a mile across. Ridges rising about 2000–3000 feet higher and then still under snow enclose it on all sides except to the northeast where a broad gap gives access over a scarcely perceptible watershed to the head of the Tangi-tar valley. On a small knoll in the centre of the plateau I discovered the foundations of a square

enclosure, solidly built and manifestly of early date. The plan of quarters within showed it clearly to have served as a sarai for wayfarers. The spot is held sacred in Muhammadan eyes, decayed graves within the enclosure attesting here as so often elsewhere in Chinese Turkistān 'continuity of local worship' since Buddhist times.

From the Chichiklik plateau three different tracks lead to the valley drained by the Tangi-tar river. Two of them lie across the easterly mountain spur by the Yangi-dawan and Yambulak passes respectively. But these passes imply a considerable ascent and are liable to become closed by snow early in the autumn. Hence the usual route leads across the previously mentioned gap into the Tarbāshi valley which is frequented by Kirghiz as a grazing-ground, and thence descends in an extremely confined gorge appropriately known as Tangi-tar, to the river of the same name. The passage of this gorge is distinctly difficult for laden animals and in places dangerous for the baggage as for about two miles deep pools of tossing water and big slippery boulders have to be negotiated between high and precipitous cliffs(26). The gorge is altogether impassable during the summer months when the flood from the melting snows fills its bottom, and traffic is then diverted to the two passes of Yangi-dawan and Yambulak. In spite of an unusually late spring I found the passage of the Tangi-tar gorge already very troublesome on the 5th June, 1906.

An adventure recorded in Hsüan-tsang's biography proves that it was the track down this gorge which he followed when on his way towards Yangi-hisār and Kāshgar(27). We are told there how the 'Master of the Law' on the fifth day from the capital of Chieh-p'ant'o (Sarīkol) "encountered a troop of robbers. The traders accompanying him were seized with fear and clambered up the sides of the mountains. Several elephants, obstinately pursued, fell into the water and perished. After the robbers had been passed, Hsüan-tsang slowly advanced with the traders, descended the heights to the east and, braving a rigorous cold, continued his journey amidst a thousand dangers. After having thus covered 800 li, he passed out of the Ts'ung-ling mountains and arrived in the kingdom of Wu-sha [Yangi-hisār and Yārkand]".

The time occupied in the journey from Tāsh-kurghān and the exceptional facilities offered by the Tangi-tar gorge for such an attack clearly point to its scene having lain there. In the late autumn, the time of Hsüan-tsang's passage, no other stream on the route could have held sufficient water to be dangerous to elephants, except that

of Tangi-tar which retains deep pools of water even in the winter. The eight hundred li or eight marches are a quite correct reckoning for the journey of a caravan from the gorge to Yangi-hisār. There can be no doubt about Hsüan-tsang having done it by the regular route across the Tor-art pass to Chihil-gumbaz where the road to Yārkand branches off, and thence across the loess-covered spur of Kashka-su into the valley debouching into the plains above Ighiz-yār.

When I struggled across the bleak plateau of Chichiklik, still snow-covered early in June, 1906, and again in a snow-storm on the 28th September 1930, I felt duly impressed by the recollection of the trials which Benedict Goëz, the brave Jesuit, had experienced here on his journey to Yarkand in the late autumn of 1603(28). After crossing the Pāmīrs-by what exact route we do not know-he and the large Kāfila of merchants to which he had attached himself had at the hamlets of the 'province of Sarcil', i.e., Sarīkol, "halted two days to rest the horses. And then in two days more they reached the foot of the mountain called Ciecialith [Chichiklik]. It was covered deep with snow, and during the ascent many were frozen to death and our brother barely escaped, for they were altogether six days in the snow here. At last they reached Tanghetar [Tangi-tar], a place belonging to the kingdom of Cascar [Kāshgar]. Here Isaac the Armenian fell off the bank of the great river into the water, and lay, as it were, dead for some eight hours till Benedict's exertions at last brought him to. In fifteen days more they reached the town of laconich [Yaka-arik], and the roads were so bad that six of our brother's horses died of fatigue. After five days more our Benedict going on by himself in advance reached the capital which is called Hiarchan [Yarkand]".

It is clear that the route followed by Goëz was identical with the present main caravan track which, after descending the Tangi-tar gorge and crossing the Tor-art, as already referred to, diverges at Chihil-gumbaz towards Yārkand. The accident which befell his faithful companion, Isaac the Armenian, obviously took place at one of the deep pools of Tangi-tar.

There still remains to be briefly mentioned the route which from Sarikol leads northward past the meridional range of Muz-tāgh-atā and Kungur and then turning the flank of the latter in the deep-cut gorges of Gez follows the narrow valley of the Yamān-yār down to Tāshmalik and thence across the fertile plain to Kāshgar. This route offers splendid views of the huge ice-crowned peaks of the range

along the foot of which it passes from above Tagharma and has often been followed by modern travellers(29). After crossing the easy saddle of Ulūgh-rabāt it leads over open Pāmīr-like ground past the lakes of Little Kara-kul and Bulun-kul as far as Tar-bāshi where the tortuous gorges of Gez are entered(294).

Whether it is owing to the difficult passage offered by the latter and the total absence of grazing there and for several marches lower down or owing to some other reason, this route to Kashgar is not ordinarily followed by caravans, and I know of no early account of it. It has, however, been conjectured, not altogether without reason, that Marco Polo may have travelled at least over the lower part of it, after leaving the Great Pāmīr. He tells: "Now if we go on with our journey towards the east-north-east, we travel a good forty days, continually passing over mountains and hills, or through valleys, and crossing many rivers and tracts of wilderness. And in all this way you find neither habitation of man, nor any green thing, but must carry with you whatever you require "(30). The absence of any reference to the inhabited tract of Sarīkol might suggest that, for some reason we shall never know, the Venetian traveller's caravan, after leaving the Great Pāmīr, moved down the Ak-su river and then, crossing the watershed eastwards by one of the several available passes, struck the route leading past the Muz-tagh-ata massif and on towards the Gez defile. The duration of forty days counted for such a journey is certainly much in excess of what an ordinary traveller would need. But it must be remembered that Goëz, too, speaks of the 'desert of Pamech' (Pāmīr) taking forty days to cross if the snow was excessive(31).

I have had to leave to the last the tracing of that route leading past the Pāmīrs of which the earliest record has come down to us. I mean the ancient trade route skirting the Pāmīrs on the north by which the 'silk of Seres' was carried from China to the Oxus basin. The notice has been preserved for us in the 'Geography' of Ptolemy who wrote about the middle of the second century A.D. Short as it is, it claims considerable interest, be it only on the ground of its being the only Western notice of the channel through which passed in classical times the most important of the trade links between the Far East and the Mediterranean regions. This record has accordingly been much discussed by scholars even before there was adequate knowledge available of the ground through which the route led.

The notice is contained in an introductory chapter where Ptolemy takes occasion learnedly to discuss statements advanced by

the geographer Marinus as to the length of the inhabited world(32). With regard to a certain measurement as to the distances between Hierapolis on the Euphrates and 'Sēra the metropolis of the Sēres', i.e., of the Chinese, Marinus is quoted as having stated that "one Maës, a Macedonian, called also Titianus, who was a merchant by hereditary profession, had written a book giving the measurement in question which he had obtained not by visiting the Sēres in person, but from the agents whom he had sent there". Marinus is known to have flourished about the close of the first century A.D. and the record of Maës, a merchant probably from one of the Macedonian colonies established in Syria or Mesopotamia, being approximately contemporary, belongs to the period of the Later Han dynasty when the silk trade flourished and was favoured by Chinese control of the Tārīm basin.

Marinus' account of the route followed by Maës' agents shows it to have passed through Mesopotamia, north-western Persia and the present Transcaspia to 'Antiochia of Margiana' or Merv, and so on to Bactria, the present Balkh, "whence it turns towards the north in ascending the mountainous tract of the Kōmēdoi. And then in passing through this mountainous tract it pursues a southern course as far as the ravine which adjoins the plain country". Subsequently after referring to certain assumptions as regards bearings on sections of the route and to detours made by it Ptolemy quotes Marinus as saying: "The traveller having ascended the ravine arrives at the Stone Tower, after which the mountains that trend to the east unite with Imaus, the range that runs up to the north from Palimbothra". Another passage of Ptolemy, derived from Marinus, places the station or Sarai 'whence traders start on their journey to Sēra' to the east of the Stone Tower and in the axis of Mount Imaus itself(33).

It is the merit of Baron Richthofen, the great geographer, and of Sir Henry Yule to have clearly demonstrated that the route followed by Maës' agents must have led up the Alai and on to Kāshgar(34), and that by the 'mountains of the Kōmēdoi' is meant the long-stretched Kara-tegīn tract in the main valley of which the Kizil-su or Surkh-āb (the 'Red River') draining the Alai makes its way to the Oxus east of Balkh. This location is definitely proved by the name Kumēdh which early Arab geographers apply to Kara-tegīn and the Position which Hsüan-tsang indicates for the territory of Chü-mi-t'o, this being the Chinese transcription of a similar form of the name.

In the summer and early autumn of 1915 Fate in the shape of the alliance with Imperial Russia gave me the long and eagerly

wished-for chance of following in person the greater part of this ancient 'silk route' from the Alai down to the submontane plain of the Hisār region, then under the Amīr of Bukhāra. Fourteen years before, on returning from my first Central-Asian expedition, I had been able to see the eastern portion of the route from Kāshgar right up to the western extremity of the Alai where it passes under the flank of Mount Imaus, i.e., the great meridional range forming the eastern rim of the Pāmīrs. I am thus able to speak with some personal knowledge of the ground over which the route passed between Kāshgar and Hisār.

From Termez, where traffic coming from Balkh and its modern successor as a trade-centre, Mazār-i-Sharīf, usually crosses the Oxus, an easy route up the Surkhan river brings the traveller to the wide and fertile plain in the centre of the Hisar tract. In this we may safely recognize 'the plain country' which the ravine mentioned by Marinus' authority adjoins(35). In the comparatively narrow main valley of Kara-tegin, stretching for some 155 miles from Ab-i-garm where the regular road from the Hisar side enters it, up to Darautkurghan where the Alai is reached, there is more than one defile by the river. But it is practicable for laden transport, even camels, throughout and owing to its plentiful agricultural produce offers a convenient line of communication. Then below Daraut-kurghin, now the highest village on the Kizil-su, the valley opens out into the great Pāmīr-like valley of the Alai. It is in the vicinity of Darautkurghān, where cultivation is carried on at an elevation of about 8000 feet and where I found a Russian post in the place of a former fort, that we may place the 'Stone Tower' where, according to Marinus, the traveller arrives after having ascended the ravine(36).

It is there that those following the route now towards Kāshgar would have to take their food supplies for their onward journey. But I noted in 1915 patches of recent or old cultivation for fully 27 miles above Daraut-kurghān up to an elevation of about 9000 feet. The Alai valley in general physical character resembles a Pāmīr, being an open trough with a width at its floor nowhere less than six miles. But owing to its lower elevation, from about 8000 feet at Daraut-kurghān to not more than 11,200 feet at the Taun-murun saddle as its eastern end, and owing to a somewhat moister climate, the steppe vegetation is here far more ample than on the Pāmīrs. In consequence the Alai forms, or, until the Soviet régime, formed, a favourite summer grazing-ground for very numerous camps of Kirghiz nomads.

With its open ground and excellent grazing, the great Alai valley seems as if intended by nature to serve as a very convenient channel for traffic from east to west such as the traders bringing silk from the Tārīm basin needed. Another important advantage was that, what with the cultivation at one time carried on above Daraut-kurghān in the west and still at present to be found at Irkesh-tam to the east of the Taun-murun saddle, the distance on the Alai route over which shelter was not to be found scarcely exceeded 70 miles or three easy marches on such ground.

The route remains open for eight or nine months in the year for laden animals, including camels. Even in the months of December to February when snow is deep, it would be practicable in the same way as is the trade route from Irkesh-tam across the Terek pass (12,700 feet above sea-level), provided there were enough traffic to tread a track through the snow. But such traffic between Kāshgar and the Oxus region as was once served by this ancient 'silk route' no longer exists. The trade of the Tarim basin from Kashgar now proceeds towards Farghana, reaching the Russian railway at Andijan across the Terek pass, while what trade in sheep and cattle there comes up Kara-tegin from the hill tracts towards the Oxus is diverted at Daraut-kurghān towards Marghilān and the railway. However during the months of May and early June when the melting snow closes the Terek pass, the eastern end of the Alai sees some of the Kāshgar trade to Farghāna making its way across the Taun-murun to the easier Taldik pass over the Alai.

At Irkesh-tam, the present Russian frontier and Customs station(37), we may safely locate 'the station at Mount Imaus whence traders start on their journey to Sēra', as suggested long ago by Baron Richthofen. It is here that the Alai route is joined by another, much frequented in modern times and probably in antiquity also, which leads from fertile Farghāna across the Terek pass to Kāshgar. This location of the 'traders' station' at Irkesh-tam is strongly supported by Ptolemy's statements elsewhere which place it due east of the Stone Tower and at the north-eastern limits of the territory of the 'nomadic Sakai', the Iranian predecessors of the present Kirghiz.

At the period to which the information recorded by Maës refers direct Chinese control is not likely to have extended beyond the watershed between the Tārīm basin and the Oxus. Thus Irkeshtam, where some cultivation is possible at an elevation of about 8550 feet, would have offered a very convenient position for one of those

frontier control-stations which the Chinese administration has always been accustomed to maintain on the borders and which is still maintained here at present.

The trade route thence to Kāshgar leads down the valley drained by one of the main feeders of the Kizil-su. It has often been described and offers no difficulties. In June 1901 I was able to cover it with baggage on ponies in six marches though the large camel-caravane frequenting it naturally take a good deal longer. Far away at I am now from needful books, I can trace no early reference to this chief artery of the present day, and my survey of the routes past the Pāmīrs may hence close here.

There is abundant evidence in Chinese and other early records that Kāshgar was all through historical times the chief trade emporium on the most frequented road connecting Western Turkistān with China. But there those agents of Maës, the Macedonian trader, found themselves still very far away from the 'Metropolis of Sēra', the Chinese capital of Han times which then stood at Lo-yang in the province of Honan. In the light of my experience of caravan traffic in these regions of Asia the estimate of seven months' journey to the Sēra capital from the Stone Tower which Maës' plucky agents reported and which Ptolemy (I. xi. 4) doubted, could scarcely be thought much exaggerated.

⁽¹⁾ See Curzon, The Pamirs and the Source of the Oxus, R. Geographical Society, London, 1898.

⁽²⁾ See Geiger, Die Pamir Gebiete, Geographische Abhandlungen, edited by Dr. A. Penck, II. 1, Vienna, 1887.

⁽³⁾ Cf. Ptolemy, Geographia, I. xii. 3; VII. xiii. 1.

⁽⁴⁾ See Geographical Journal, 1925, pp. 377-403, 473-98.

^(*) See the translations in Julien, Mémoires sur les contrées occidentales, i. pp. 201 sqq.; Watters, On Yuan Chwang's Travels, ii., pp. 279 sqq.

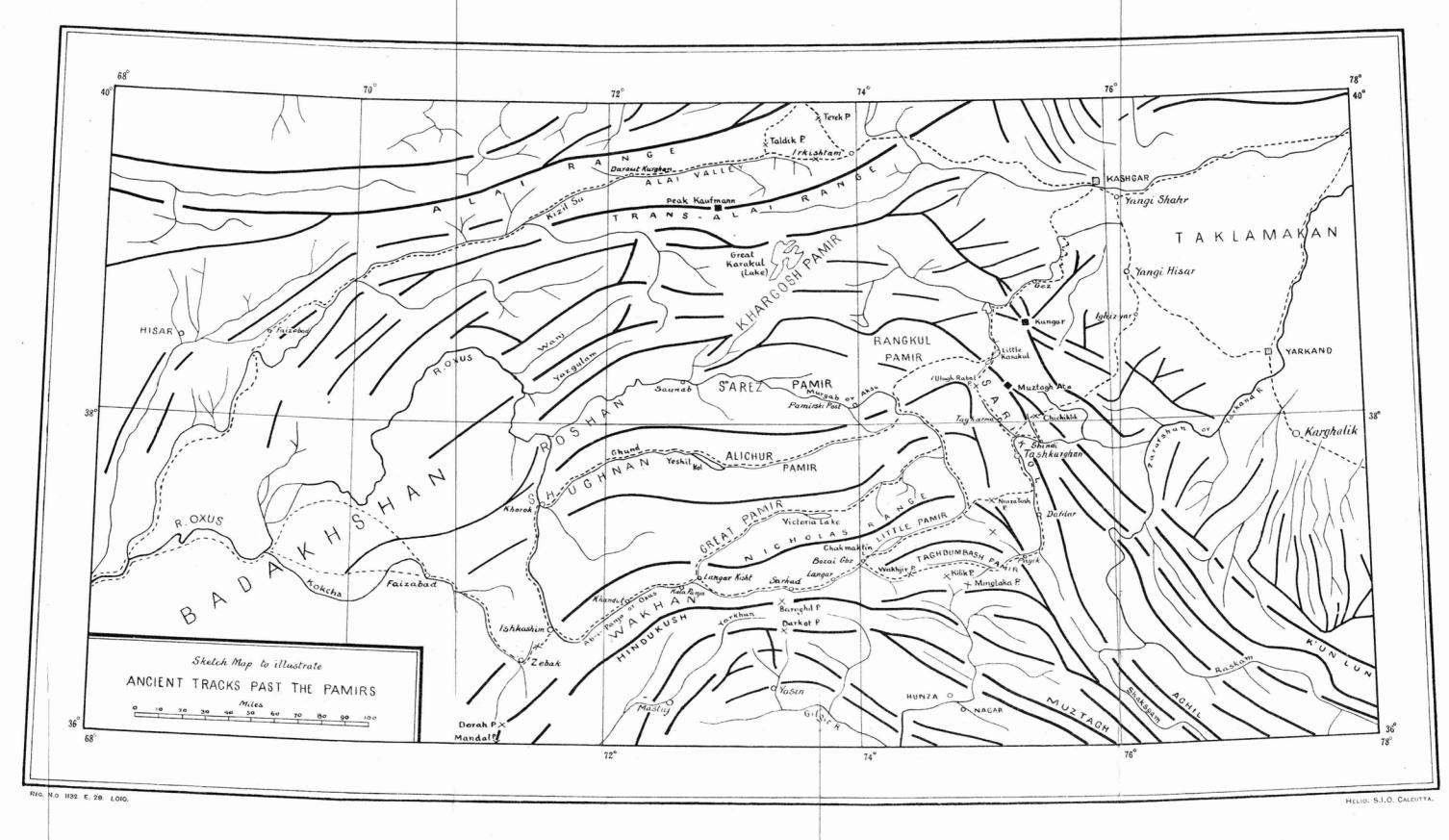
^(°) Sung Yün's route has been fully discussed by me in Serindia, i., pp. 9 sqq.

⁽⁷⁾ Cf. Wood, Journey to the Source of the Oxus, 2nd ed., pp. 208 sqq.; Gordon The Roof of the World, pp. 135 sq.; Stein, Innermost Asia, ii., 865 sqq.; also Schultz, Forschungen in Pamir, pp. 139 sqq.; Olufsen, In the Unknown Pamir passim.

^(*) See Serindia, i., p. 70.

^(*) See above, note 7.

⁽¹⁰⁾ For accounts of the fortresses of Zamr-i-ātish-parast and Namadgu of. in particular Innermost Asia, ii., pp. 866 sqq., 872 sqq.



- (") For an analysis of these records, see *Innermost Asia*, i., pp. 61 sqq. The Annals duly note *Hu-mi* as the Chinese name of Wakhān, by the side of the name *Ta-mo-hsi-t'ie-ti* of Hsüan-tsang which still awaits explanation.
- (12) For an analysis of the anthropometrical records secured by me, cf. Mr. T. A. Joyce's Appendix C in *Innermost Asia*, ii., pp. 996 sqq.
 - (13) Cf. Yule, The Book of Ser Marco Polo, 3rd edition, i., pp. 170 sqq.
 - (14) Cf. Innermost Asia, i., p. 65.
- (15) See Serindia, i., pp. 52 sqq., 66 sqq.; Geographical Journal, 1922, February, pp. 112-131.
- (10) Cf. Chavannes, Documents sur les Turcs occidentaux (Imperial Academy of Sciences, St. Petersburg, 1903), p. 152 sq.
- (10a) See Ruins of Desert Cathay, i., Fig. 29; Mountain Panoramas of the Pamirs and Kwenlun, R. Geographical Society, Panor. VII.
 - (17) Cf. Desert Cathay, i., pp. 83 sqq.
- (18) For a description of the valley cf. Sand-buried Ruins of Khotan, pp. 59 sqq.
 - (10) Cf. Serindia, i., pp. 72 sqq.
- (20) For an analysis of these Chinese and other early records of Sarikol, cf. Ancient Khotan, i., pp. 27 sqq.
 - (21) See Yule, Marco Polo, i., p. 171.
- (22) Cf. Julien, Mémoires des contrées occidentaux, ii., pp. 207 sqq.; Watters, Yuan Chwang, ii., pp. 282 sq.; Innermost Asia, ii., pp. 858 sqq.
 - (23) For references to these itineraries, cf. Innermost Asia, ii., p. 880.
- (24) For translations of the narrative, see Julien, Mémoires, ii., p. 215; Watters, Yuan Chwang, ii., p. 285; also Beal, Si-yu-ki, ii., p. 303.
 - (25) Cf. Serindia, i., p. 77 sq.
- (**) For a description, see Ruins of Desert Cathay, i., pp. 99 sq.; also Serindia i., Fig. 29.
- (27) See Julien, Histoire de la vie de Hiouen-Thsang, pp. 274 sq., Beal, Life of Hiuen Tsiang, p. 200.
- (28) For Sir Henry Yule's translation of Goëz' record, put together by Ricci from such notes as could be recovered after the devoted Portuguese lay brother 'seeking Cathay had found Heaven' at Su-chou, see Yule, Cathay and the Way Thither, ii., p. 562.
 - (*) For a description of it, see Stein, Sand-buried Ruins of Khotan, pp. 76-105.
 - (20a) Sand-buried ruins of Khotan, pp. 108 sqq.
- (*0) See Yule, Marco Polo, 3rd edition, i., pp. 171 sqq.; Prof. H. Cordier's notes, ibid., i., pp. 175, 182; also Stein, Ancient Khotan, i., pp. 41 sq.
 - (81) Cf. Yule, Cathay and the Way Thither, ii., pp. 563 sq.
- (*2) Cf. Ptolemy, Geographia, I. Chap. xi; for a translation, see McCrindle, Ancient India as described by Ptolemy, pp. 8 sqq.
 - (33) See Ptolemy, Geographia, VI. Chap. xiii; McCrindle, loc. cit., p. 284.
- (**) For references to Richthofen's and Yule's works, as well as to other publications dealing with the route of Maës, see my Ancient Khotan, i., pp. 54 **eqq.; Innermost Asia, ii., pp. 849 **eq.;
- (**) For a summary of the topographical facts supporting this tracing of the route, see *Innermost Asia*, loc. cit.
- (36) I believe, we may recognize some evidence of the location of the 'plain country' reported by Maës' agents in the distance which the passage of Ptolemy

(I. xii. 8) undoubtedly on their authority indicates immediately before quoting the words of Marinus (see p. 21): "When the traveller had ascended the ravine he arrives at the Stone Tower", etc. Ptolemy refers here to certain bends in the route after it has entered the mountainous country of the Kōmēdoi and then states that "while (generally) advancing to the east it straight turns off to the south and thence probably takes a northerly turn for fifty schoeni up to the Stone Tower".

I have already in *Innermost Asia*, ii., p. 850, hinted at my belief that the point where the plain country is left for the ravine has to be sought for near Āb-i-garm, a large village reached from Faizābād in the easternmost portion of the open Hisār tract, by one march along the caravan route leading to the main valley of Kara-tegīn. Now from Āb-i-garm this route which from Faizābād has so far followed a north-easterly line across down-like country turns sharply to the south-east into a narrow valley in order to reach some four miles lower down the right bank of the Surkh-āb which it thence ascends in a north-easterly direction to Daraut-kurghān.

It is near Āb-i-garm that I believe we must place the point where the 'plain country' adjoins the ravine. For this assumption there is support in the distance which is mentioned between this point and the Stone Tower. Measured on the French General Staff's 1: 1,000,000 map of Asia (Flle 40°N. 72°E) based on the Russian surveys the distance from Āb-i-garm to Daraut-kurghān is about 155 English miles. Accepting the equation of 30 stadia to the schoenos (see VI. xi. 4) and reckoning the stadion at 606% English feet or approximately one-eighth of an English mile, this brings us close enough to the measurement of circ. 190 miles recorded by Maës' agents, if due allowance is made for the necessary excess of the marching distance in hilly country over the map distance.

I may add that the meaning of Ptolemy's passage in McCrindle's translation is somewhat obscured by the too literal rendering of some of the words, unavoidable at a time when the configuration of the ground could not yet receive adequate attention. What must be regretted most is that Ptolemy has not preserved for us throughout the actual text of his predecessor.

(37) Cf. Stein, Sand-buried Ruins of Khotan, p. 495.