au cours d'une ascension bravement pousée jusqu'à plus de 2000 métres au-dessus de l'altitude du Mont-Blanc, une voie d'accès, qui paraît praticable, vers le sommet du Géant des Montagnes. Nous déplorons que de pareilles expéditions ne puissent se faire sans de très grandes risques, et nous souhaitons aux explorateurs de 1922 de revenir tous en parfaite santé, après que les Alpinistes de l'expédition auront eu l'honneur d'atteindre le plus haut sommet qui dans le Monde reçoive le baiser du soleil.

Mes collègues et moi, nous vous félicitous infiniment de la fraternité cordiale des Alpinistes Britanniques et Français, semblable à celle des combattants de nos deux Nations, qui ont souffert et lutté côte à côte pendant la Grande Guerre, et dans un sentiment de gratitude pour l'amiable accueil fait aux représentants du Club Alpin Français, nous souhaitons tous les bonheurs, tous les succès à votre Altesse Royale, à Monsieur le Président de l'Alpine Club, à Monsieur le Président de la Royal Geographical Society.

The President, in conclusion, offered the congratulations and thanks of the Meeting to the speakers, Colonel Howard-Bury and Mr. Mallory, and to all the members of the expedition; and in the name of the R.G.S. and the Alpine Club thanked the French Alpine Club for their signal proof of friend-ship in sending a distinguished delegation from France to attend the Meeting.

## A CHINESE EXPEDITION ACROSS THE PAMIRS AND HINDUKUSH, A.D. 747

## Sir Aurel Stein, K.C.I.E.

A<sup>T</sup> the beginning of my second Central Asian journey (1906-08), and again at that of the third (1913-16), I had the good fortune to visit ground in the high snowy range of the Hindukush which, however inaccessible and remote it may seem from the scenes of the great historical dramas of Asia, was yet in the eighth century A.D. destined to witness events closely bound up with a struggle of momentous bearing for vast areas of the continent. I mean the glacier pass of the Darkot (15,400 feet above sea-level) and the high valleys to the north and south of it through which leads an ancient route connecting the Pamirs and the uppermost headwaters of the Oxus with the Dard territories on the Indus, and thus with the north-west marches of India.\*

The events referred to arose from the prolonged conflict with the Arabs in the west and the rising power of the Tibetans in the south

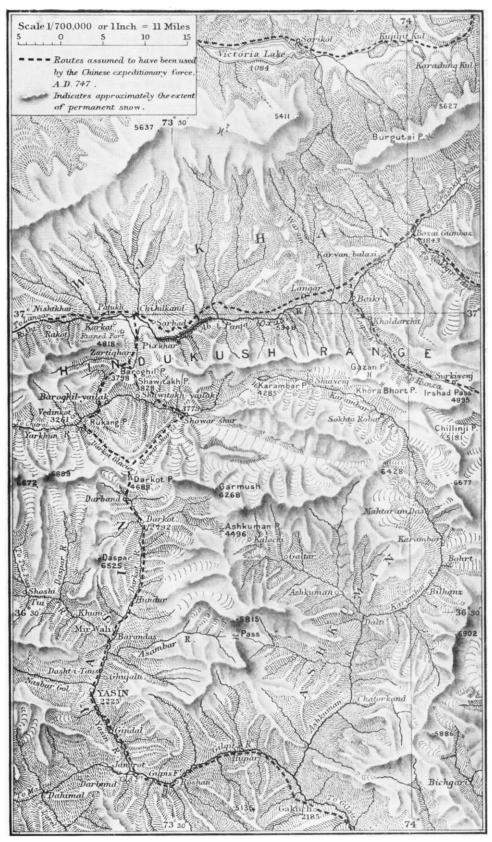
\* The accompanying sketch-map I is intended to illustrate the general features of the mountain territories between the western T'ien-shan and the Indus which were affected by the political developments and military operations discussed in this paper.

Sketch-map 2 reproduces essential topographical details of that portion of the ground between the uppermost Oxus and Gilgit river valleys which witnessed the chief exploits of the Chinese expedition of A.D. 747 into the Hindukush region. It has been prepared from Northern Transfrontier Sheet No. 2 S.W. of the Survey of India, scale 4 miles to 1 inch.

For convenient reference regarding the general topography of this mountain region may be recommended also sheet No. 42 of the I: 1,000,000 map of Asia published by the Survey of India (Calcutta, 1919).



I. SKETCH-MAP OF MOUNTAIN COUNTRY BETWEEN THE WESTERN T'IEN-SHAN AND THE INDUS



2. SKETCH-MAP OF THE COUNTRY BETWEEN THE HEAD OF THE OXUS AND THE GILGIT RIVER. Heights in metres

into which the Chinese empire under the T'ang dynasty was brought by its policy of Central Asian expansion. Our knowledge of the memorable expedition of which I propose to treat here, and of the historical developments leading up to it, is derived wholly from the official Chinese records contained in the Annals of the T'ang dynasty. They were first rendered generally accessible by the extracts which M. Chavannes, the lamented great Sinologue, published in his invaluable 'Documents sur les Turcs occidentaux.'\*

In order to understand fully the details of the remarkable exploit which brought a Chinese army right across the high inhospitable plateaus of the Pamirs to the uppermost Oxus valley, and thence across the ice-covered Darkot down to the valleys of Yasin and Gilgit draining into the Indus, it is necessary to pay the closest regard to the topography of that difficult ground. Modern developments arising from the Central Asian interests of two great Asiatic powers, the British and Russian empires, have since the eighties of the last century helped greatly to add to our knowledge of the regions comprised in, or adjacent to, the great mountain massif in the centre of Asia which classical geography designated by the vague but convenient name of *Imaos*. But much of the detailed topographical information is not as yet generally accessible to students. Even more than elsewhere personal familiarity with the ground in its topographical and antiquarian aspects seems here needed for a full comprehension of historical details.

This local knowledge I was privileged to acquire in the course of the two Central Asian expeditions already referred to, and accordingly I have taken occasion to elucidate the facts connected with that memorable Chinese exploit in *Serindia*, the detailed report on my second journey, soon to be issued from the Oxford University Press.<sup>†</sup> The bulk and largely archaeological contents of this work may prevent that account from attracting the attention of the geographical student. Hence, with the kind permission of the Delegates of the Oxford University Press, I avail myself of the opportunity to present here the main results of my researches.

Some preliminary remarks seem needed to make clear the political and military situation which prevailed in Central Asia during the first half of the eighth century A.D., and which accounted for the enterprise to be discussed here.  $\ddagger$  After a long and difficult struggle the Chinese under the great T'ang emperors T'ai-tsung (A.D. 627-650) and Kao-tsung (A.D. 650-684) succeeded in vanquishing, first the Northern Turks (A.D. 630), and after a short interval also the Western Turks. They were the

\* 'Documents sur les Tou-kiue (Turcs) occidentaux recueillis et commentés par Édouard Chavannes, Membre de l'Institut,' etc., published by the Imperial Acatlemy of Sciences of St. Petersburg, 1903; see in particular pp. 149–154.

† The work has appeared since the above was written [ED. G.J.]

**<sup>‡</sup>** For a masterly exposition from Chinese and Western sources of all historical facts here briefly summed up, see M. Chavannes' 'Essai sur l'histoire des Tou-kiue occidentaux,' forming the concluding portion of his 'Documents sur les Turcs occidentaux,' pp. 217-303.

principal branches of that great Turkish nation which since its victory over the Juan-juan (Avars) and the Hoa, or Hephthalites, about the middle of the seventh century, had made itself master of inner Asia. By A.D. 659 the Chinese had regained political predominance, and for the most part also military control, over the great Central Asian territories roughly corresponding to what is now known as Chinese Turkestan, after having lost them for about four centuries.\*

This renewed effort at Central Asian expansion, like that first made by the great Han emperor Wu-ti (140-86 B.C.), had for its object partly the protection of north-western China from nomadic inroads and partly the control of the great Central Asian trade route passing through the Tarim basin. Stretching from east to west between the great mountain ranges of the T'ien-shan in the north and the K'un-lun in the south, the Tarim basin is filled for the most part by huge drift-sand deserts. Yet it was destined by nature to serve as the main overland line for the trade intercourse between the Far East and Western Asia, and recent archæological explorations have abundantly proved its great importance generally for the interchange of civilizations between China, India, Iran, and the classical West.

During Han times, when China's great export trade of silk had first begun about 110 B.C. to find its way westwards through the strings of oases scattered along the foot of the T'ien-shan and K'un-lun, the Chinese hold upon the "Western Kingdoms" with their settled and highly civilized populations had been threatened mainly by inroads of the Huns and other nomadic tribes from the north. After the reconquest under the Emperor Kao-tsung the situation was essentially different. The danger from the nomadic north had lessened. Troubles with the medley of Turkish tribes left in possession of the wide grazing areas beyond the T'ien-shan never ceased. Yet the Chinese administration by a wellorganized system of garrisons, and still more by diplomatic skill, was well able to hold them in check. But additional and greater dangers had soon to be faced from other sides. The claim to the succession of the whole vast dominion of the Western Turks was drawing the administration of the Chinese protectorate, established in the Tarim basin and known as the "Four Garrisons," into constant attempts to assert effective authority also to the west of the great meridional range, the ancient Imaos, in the regions comprising what is now Russian and Afghan Turkestan.<sup>†</sup>

Considering the vast distances separating these regions from China proper and the formidable difficulties offered by the intervening great deserts and mountain ranges, Chinese control over them was from the outset bound to be far more precarious than that over the Tarim basin.

<sup>\*</sup> Cf. Chavannes, 'Turcs occidentaux,' pp. 266 sqq.

<sup>†</sup> For very interesting notices of the administrative organization which the Chinese attempted soon after A.D. 659 to impose upon the territories from the Yaxartes to the Oxus and even south of the Hindukush, see Chavannes, 'Turcs occidentaux,' pp. 268 sqq.

But the dangers besetting Chinese dominion in Central Asia increased greatly with the appearance of two new forces upon the scene. Already in the last quarter of the seventh century the newly rising power of the Tibetans seriously threatened and for a time effaced the Chinese hold upon the Tarim basin.\* Even after its recovery by the Chinese in A.D. 692 the struggle never quite ceased.

Another and almost equally great threat to China's Central Asian dominion arose in the west through the advance of Arab conquest to the Oxus and beyond. About A.D. 670 it had already made itself felt in Tokharistan, the important territory on the middle Oxus comprising the greater part of the present Afghan Turkestan. Between A.D. 705 and 715 the campaigns of the famous Arab general Qotaïba had carried the Muhammadan arms triumphantly into Sogdiana, between Oxus and Yaxartes, and even further.<sup>†</sup> By taking advantage of internal troubles among the Arabs and by giving support to all the principalities between the Yaxartes and the Hindukush which the Arabs threatened with extinction, the Chinese managed for a time to stem this wave of Muhammadan aggression. But the danger continued from this side, and the Chinese position in Central Asia became even more seriously jeopardized when the Tibetans soon after A.D. 741 advanced to the Oxus valley and succeeded in joining hands with the Arabs, their natural allies.

Baulked for the time in their attempts to secure the Tarim basin, the Tibetans had only one line open to effect this junction. It led first down the Indus from Ladak through Baltistan (the "Great P'o-lü" of the Chinese Annals) to the Hindukush territories of Gilgit and Yasin, both comprised in the "Little P'o-lü" of the Chinese records.<sup>‡</sup> Thence the passes of the Darkot and the Baroghil-the latter a saddle in the range separating the Oxus from the Chitral river headwaters-would give the Tibetans access to Wakhan; through this open portion of the upper Oxus valley and through fertile Badakhshan the Arabs established on the middle Oxus might be reached with comparative ease. But an advance along the previous portions of this route was beset with very serious difficulties, not merely on account of the great height of the passes to be traversed and of the extremely confined nature of the gorges met with on the Indus and the Gilgit river, but quite as much through the practical absence of local resources sufficient to feed an invading force anywhere between Ladak and Badakhshan.

Nevertheless the persistent advance of the Tibetans along this most difficult line is clearly traceable in the Chinese records. "Great P'o-lü," *i.e.* Baltistan, had already become subject to them before A.D. 722. About that time they attacked "Little P'o-lü," declaring, as the T'ang Annals

<sup>\*</sup> Cf. Chavannes, 'Turcs occidentaux,' pp. 280 sqq.

<sup>†</sup> See Chavannes, ibid., pp. 288 sqq.

<sup>‡</sup> Cf. for this identification Chavannes, *ibid.*, p. 150, and 'Notes supplémentaires'; also my 'Ancient Khotan,' i. pp. 6 sqq.

tell us, to Mo-chin-mang its king : "It is not your kingdom which we covet, but we wish to use your route in order to attack the Four Garrisons (*i.e.* the Chinese in the Tarim basin)." \* In A.D. 722 timely military aid rendered by the Chinese enabled this king to defeat the Tibetan design. But after three changes of reign the Tibetans won over his successor Su-shih-li-chih, and inducing him to marry a Tibetan princess secured a footing in "Little P'o-lü." "Thereupon," in the words of the *T*<sup>c</sup>ang shu, "more than twenty kingdoms to the north-west became all subject to the Tibetans." † These events occurred shortly after A.D. 741.‡

The danger thus created by the junction between Tibetans and Arabs forced the Chinese to special efforts to recover their hold upon Yasin and Gilgit. Three successive expeditions despatched by the "Protector of the Four Garrisons," the Chinese Governor-General, had failed, when a special decree of the Emperor Hsüan-tsang in A.D. 747 entrusted the Deputy Protector Kao Hsien-chih, a general of Korean extraction commanding the military forces in the Tarim basin, with the enterprise to be traced here. We owe our detailed knowledge of it to the official biography of Kao Hsien-chih preserved in the T'ang Annals and translated by M. Chavannes. To that truly great scholar, through whose premature death in 1918 all branches of historical research concerning the Far East and Central Asia have suffered an irreparable loss, belongs full credit for having recognized that Kao Hsien-chih's remarkable expedition led him and his force across the Pamirs and over the Baroghil and Darkot passes. But he did not attempt to trace in detail the actual routes followed by Kao Hsien-chih on this hazardous enterprise or to localize the scenes of all its striking events. To do this in the light of personal acquaintance with the topography of these regions, their physical conditions, and their scanty ancient remains, is my object in the following pages.

With a force of 10,000 cavalry and infantry Kao Hsien-chih started in the spring of A.D. 747 from An-hsi, then the headquarters of the Chinese administration in the Tarim basin and corresponding to the present town and oasis of Kucha.§ In thirty-five days he reached Su-lê, or Kashgar, through Ak-su and by the great caravan road leading along the foot of the T'ien-shan. Twenty days more brought his force to the military post of the Ts'ung-ling mountains, established in the position of the present Tashkurghan in Sarikol. Thence by a march of twenty days the "valley of

\* See Chavannes, 'Turcs occidentaux,' p. 150.

+ Cf. Chavannes, *ibid.*, p. 151. By the twenty kingdoms are obviously meant petty nill principalities on the Upper Oxus from Wakhan downwards, and probably also others in the valleys south of Hindukush, such as Mastuj and Chitral.

<sup>‡</sup> Cf. Stein, 'Ancient Khotan,' i. p. 7. A.D. 741 is the date borne by the Imperial edict investing Su-shih-li-chih's immediate predecessor; its text is still extant in the records extracted by M. Chavannes, 'Turcs occidentaux,' pp. 211 sqq.

§ For these and all other details taken from M. Chavannes' translation of Kao Hsienchih's biography in the T'ang shu, see 'Turcs occidentaux,' pp. 152 sqq.

|| 73'ung-ling, or "the Onion Mountains," is the ancient Chinese designation for the great snowy range which connects the T'ien-shan in the north with the K'un-lun and

Po-mi," or the Pamirs, was gained, and after another twenty days Kao Hsien-chih arrived in "the kingdom of the five Shih-ni," *i.e.* the present Shighnan on the Oxus.

The marching distance here indicated agrees well with the time which large caravans of men and transport animals would at present need to cover the same ground. But how the Chinese general managed to feed so large a force after once it had entered the tortuous gorges and barren high valleys beyond the outlying oases of the present Kashgar and Yangihissar districts is a problem which might look formidable, indeed, to any modern commander. The biography in the Annals particularly notes that "at that time the foot soldiers all kept horses (*i.e.* ponies) on their own account." Such a provision of transport must have considerably increased the mobility of the Chinese troops. But it also implied greatly increased difficulties on the passage through ranges which, with the exception of certain portions of the Pamirs, do not afford sufficient grazing to keep animals alive without liberal provision of fodder.

It was probably as a strategic measure meant to reduce the difficulties of supply in this inhospitable Pamir region that Kao Hsien-chih divided his forces into three columns before starting his attack upon the position held by the Tibetans at *Lien-yün*. M. Chavannes has shown good reason for assuming that by the river  $P'o-l\hat{e}$  (or *So-l* $\hat{e}$ ), which is described as flowing in front of Lien-yün, is meant the Ab-i-Panja branch of the Oxus, and that Lien-yün itself occupied a position corresponding to the present village of Sarhad, but on the opposite, or southern, side of the river, where the route from the Baroghil pass debouches on the Ab-i-Panja. We shall return to this identification in detail hereafter. Here it will suffice to show that this location is also clearly indicated by the details recorded of the concentration of Kao Hsien-chih's forces upon Lien-yün.

Of the three columns which were to operate from different directions and to effect a simultaneous junction before Lien-yun on the thirteenth day of the seventh month (about the middle of August), the main force, under Kao Hsien-chih himself and the Imperial Commissioner Pien Lingch'êng, passed through the kingdom of Hu-mi, or Wakhan, ascending the main Oxus valley from the west. Another column which is said to have

Hindukush in the south, and forms the mighty eastern rim of the Pamirs. The Chinese term is sometimes extended to the high valleys and plateaus of the latter also. The range culminates near its centre in the great ice-clad peak of Muztagh-ata and those to the north of it, rising to over 25,000 feet above sea-level. It is to this great mountain chain, through which all routes from the Oxus to the Tarim basin pass, that the term *Imaos* is clearly applied in Ptolemy's 'Geography.'

The great valley of Sarikol, situated over 10,000 feet above sea-level, yet largely cultivated in ancient times, forms the natural base for any military operations across the Pamirs; for early accounts of it in Chinese historical texts and in the records of old travellers from the East and West, cf. my 'Ancient Khotan,' i. pp. 27 sqq. Descriptions of the present Sarikol and of the two main routes which connect it with Kashgar, through the Gez valley to the north of Muztagh-ata and across the Chichiklik pass in the south, are given in my 'Ruins of Khotan,' pp. 67 sqq., and 'Desert Cathay,' i. pp. 89 sqq.

moved upon Lien-yün by the route of Ch'ih-fo-t'ang, "the shrine of the red Buddha," \* may be assumed, in view of a subsequent mention of this route below, to have operated from the opposite direction down the headwaters of the Ab-i-Panja. These could be reached without serious difficulty from the Sarikol base either over the Tagh-dumbash Pamir and the Wakhjir pass (16,200 feet),† or by way of the Naiza-tash pass and the Little Pamir. Finally, a third column, composed of 3000 horsemen, which was to make its way to Lien-yün by Pei-ku, or "the northern gorge," may be supposed to have descended from the side of the Great Pamir. For such a move from the north either one of the several passes could be used which lead across the Nicholas range, south-east of Victoria lake, or possibly a glacier track, as yet unexplored, leading from the latter into one of the gorges which debouch east of Sarhad.<sup>‡</sup> In any case it is clear that by thus bringing up his forces on convergent but wholly distinct lines, and by securing for himself a fresh base in distant Shighnan, the Chinese general effectively guarded against those difficulties of supplies and transport which, then as now, would make the united move of so large a body of men across the Pamirs a physical impossibility.

The crossing of the Pamirs by a force which in its total strength amounted to ten thousand men is so remarkable a military achievement that the measures which alone probably made it possible deserve some closer examination, however succinct the Chinese record is upon which we have to base it. So much appears to me clear, that the march was not effected in one body, but in three columns moving up from Kashgar in successive stages by routes of which Tash-kurghan, "the post of the Ts'ung-ling mountains," was the advanced base or point d'appui. If Kao Hsien-chih moved ahead with the first column or detachment to Shighnan and was followed at intervals by the other two detachments, the advantage gained as regards supplies and transport must have been very great. His own column would have reached a fresh base of supplies in Shighnan while the second was moving across the main Pamirs and the third arriving in Sarikol from the plains. Thus the great strain of having to feed simultaneously the whole force on ground absolutely without local resources was avoided. It must be remembered that, once established on the Oxus, the Chinese Commissariat could easily draw upon the abundant produce of Badakhshan, and that for the column left on the Pamirs the comparatively easy route across the Alai would be available for drawing supplies from the rich plains of Farghana, then still under Chinese control.

<sup>\*</sup> The term *fo-t'ang*, which M. Chavannes translates "la salle du Bouddha . . .," designates, according to Dr. Giles's Chinese-English Dictionary, p. 1330, "a family shrine or oratory for the worship of Buddha." Considering the location, the rendering of *t'ang* by "shrine" seems here appropriate.

<sup>+</sup> For descriptions of this route, cf. my 'Ruins of Khotan,' pp. 60 sqq., and 'Desert Cathay,' i. pp. 83 sqq.

<sup>‡</sup> Regarding the existence of this track, cf. the information obtained in the course of my third Central Asian journey, *Geographical Journal*, **48** (1916), p. 216.

By disposing his force en échelon from Shighnan to Sarikol, Kao Hsienchih obtained also a strategically advantageous position. He was thus able to concert the simultaneous convergent movement of his columns upon the Tibetans at Sarhad without unduly exposing any of his detachments to separate attack and defeat by a superior Tibetan force; for the Tibetans could not leave their position at Sarhad without imminent risk of being cut off from the Baroghil, their only line of communication. At the same time the disposition of the Chinese forces effectively precluded any Tibetan advance either upon Sarikol or Badakhshan. Difficult as Kao Hsien-chih's operations must have been across the Pamirs, yet he had the great advantage of commanding two, if not three, independent lines of supplies (from Kashgar-Yarkand; Badakhshan; eventually Farghana), whereas the Tibetan force of about equal strength, cooped up at the debouchure of the Baroghil, had only a single line, and one of exceptional natural difficulty, to fall back upon. Of the territories of Yasin, Gilgit, Baltistan, through which this line led, we know that they could not provide any surplus supplies for an army.\*

The problem, as it seems to me, is not so much how the Chinese general succeeded in overcoming the difficulties of his operations across the Pamirs, but how the Tibetans ever managed to bring a force of nine or ten thousand men across the Darkot to Sarhad and to maintain it there in the almost total absence of local resources. It is certainly significant that neither before nor after these events do we hear of any other attempt of the Tibetans to attack the Chinese power in the Tarim basin by way of the uppermost Oxus, constant, and in the end successful, as their aggression was during the eighth century A.D.

The boldness of the plan which made Kao Hsien-chih's offensive possible and crowned it with deserved success must. I think, command admiration quite as much as the actual crossing of the Darkot. The student of military history has, indeed, reason to regret that the Chinese record does not furnish us with any details about the organization which rendered this first and, as far as we know, last crossing of the Pamirs by a large regular force possible. But whatever our opinion may be about the fighting qualities of the Chinese soldier as judged by our standards-and there is significant evidence of their probably not having been much more serious in T'ang times than they are now-it is certain that those who know the formidable obstacles of deserts and mountains which Chinese troops have successfully faced and overcome during modern times will not feel altogether surprised at the power of resource and painstaking organization which the success of Kao Hsien-chih's operations indisputably attests in that long-forgotten Chinese leader and those who shared his efforts.

The location of *Lien-yün* near Sarhad, as originally proposed by M. Chavannes, is confirmed by the description of the battle by which the

\* Cf. 'Ancient Khotan,' i. pp. II sqq.

Chinese general rendered himself master of the Tibetan position and of the route it was intended to guard. The three Chinese columns operating, as I have shown, from the west, east, and north, "had agreed to effect their junction on the thirteenth day of the seventh month (August) between seven and nine o'clock in the morning at the Tibetan stronghold of Lienyün. In that stronghold there were a thousand soldiers; moreover, at a distance of 15 li (about 3 miles) to the south of the rampart, advantage had been taken of the mountains to erect palisades, behind which there were eight to nine thousand troops. At the foot of the rampart there flowed the river of the valley of P'o-lê, which was in flood and could not be crossed.\* Kao Hsien-chih made an offering of three victims to the river; he directed his captains to select their best soldiers and their best horses; each man carried rations of dry food for three days. In the morning they assembled by the river-bank. As the waters were difficult to cross, officers and soldiers all thought the enterprise senseless. But when the other river-bank was reached, neither had the men wetted their standards nor the horses their saddle-cloths.

"After the troops had crossed and formed their ranks, Kao Hsien-chih, overjoyed, said to Pien Ling-ch'êng (the Imperial Commissioner): 'For a moment, while we were in the midst of the passage, our force was beaten if the enemy had come. Now that we have crossed and formed ranks, it is proof that Heaven delivers our enemies into our hands.' He at once ascended the mountain and engaged in a battle which lasted from the *ch'ên* period (7-9 a.m.) to the *ssid* period (9-11 a.m.). He inflicted a great defeat upon the barbarians, who fled when the night came. He pursued them, killed 5000 men, and made 1000 prisoners; all the rest dispersed. He took more than 1000 horses, and warlike stores and arms beyond counting."

The analysis given above of the routes followed by the Chinese columns, and what we shall show below of Kao Hsien-chih's three days' march to Mount  $T \cdot an \cdot chii$ , or the Darkot, confirm M. Chavannes in locating the Tibetan stronghold of Lien-yün near the present Sarhad, the last permanent settlement on the uppermost Oxus. It is equally clear from the description of the river crossing that the Chinese concentration must have taken place on the right or northern bank of the Ab-i-Panja, where the hamlets constituting the present Sarhad are situated, while the stronghold of Lien-yün lay on the opposite left bank.

Before I was able to visit the ground in May 1906, I had already expressed the belief that the position taken up by the Tibetan main force, 15 *li* (*circ.* 3 miles) to the south of Lien-yün, must be looked for in the valley which debouches on the Ab-i-Panja opposite to Sarhad.<sup>†</sup> It is

<sup>\*</sup> M. Chavannes has shown ('Turcs occidentaux,' p. 154) that this name  $P'o-l\hat{e}$  is a misreading easily explained in Chinese writing for *So-l* $\hat{e}$  mentioned elsewhere as a town in Hu-mi or Wakhan.

<sup>†</sup> See 'Ancient Khotan,' i. p. 7.

through this open valley that the remarkable depression in the main Hindukush range, represented by the Baroghil and Shawitakh saddles (12,460 and 12,560 feet respectively), is gained. I also surmised that the Chinese general, apart from the confidence aroused by the successful river crossing, owed his victory mainly to a flanking movement by which his troops gained the heights, and thus successfully turned the fortified line behind which the Tibetans were awaiting them.

The opinion was confirmed by what I saw of the valley leading to the Oxus on my descent from the Baroghil on 19 May 1906, and by the examination I was able to make two days later of the mountain-side flanking its debouchure from the west. The valley into which the route leads down from the Baroghil is quite open and easy about Zartighar, the southernmost hamlet. There a ruined watch-tower shows that defence of the route had been a concern also in modern times. Further down the valley-bottom gradually contracts, though still offering easy going, until, from a point about 2 miles below Zartighar to beyond the scattered homesteads of Pitkhar,\* its width is reduced to between one-half and onethird of a mile. On both sides this defile is flanked by high and very precipitous rocky ridges, the last offshoots of spurs which descend from the main Hindukush watershed.

These natural defences seemed to provide just the kind of position which would recommend itself to the Tibetans wishing to bar approach to the Baroghil, and thus to safeguard their sole line of communication with the Indus valley. The width of the defile would account for the comparatively large number of defenders recorded by the Chinese Annals for the enemy's main line; the softness of the ground at its bottom, which is almost perfectly level, covered with fine grass in the summer, and distinctly swampy in the spring owing to imperfect drainage, would explain the use of palisades, at first sight a rather strange method of fortification in these barren mountains.<sup>†</sup> Finally, the position seemed to agree curiously well with what two historical instances of modern times, the fights in 1904 at Guru and on the Karo-la, had revealed as the typical and time-honoured Tibetan scheme of defence—to await attack behind a wall erected across the open ground of a valley or saddle.

\* The Pixkhar of sketch-map 2 is a misprint.

† In my note in 'Ancient Khotan,' p. 9, I had ventured to suggest that, considering how scanty timber must at all times have been about Sarhad, there was some probability that walls or "Sangars" constructed of loose stones were really meant by the "palisades" mentioned in the translation of the passage from the T'ang Annals.

This suggestion illustrates afresh the risk run in doubting the accuracy of Chinese records on quasi-topographical points without adequate local knowledge. On the one hand, I found that the peculiar nature of the soil in the defile would make the construction of heavy stone walls inadvisable, if not distinctly difficult. On the other, my subsequent march up the Ab-i-Panja showed that, though timber was as scarce about Sarhad itself as I had been led to assume, yet there was abundance of willow and other jungle in parts of the narrow river gorge one march higher up near the debouchure of the Shaor and Baharak streams. This could well have been used for palisades after being floated down by the river.

There remained the question whether the defile of Pitkhar was capable of being turned by an attack on the flanking heights such as the Chinese record seemed plainly to indicate. The possibility of such a movement on the east was clearly precluded by the extremely precipitous character of the flanking spur, and still more by the fact that the summer flood of the Ab-i-Panja in the very confined gorge above Sarhad would have rendered that spur inaccessible to the Chinese operating from the northern bank of the river. All the greater was my satisfaction when I heard from my Wakhi informants of ruins of an ancient fort, known as Kansir, situated on the precipitous crest of the flanking spur westwards, almost opposite to Pitkhar. During the single day's halt, which to my regret was all that circumstances would allow me at Sarhad, I was kept too busy otherwise to make a close inspection of the ground where the Tibetan post of Lien-yün might possibly have been situated. Nothing was known locally of old remains on the open alluvial plain which adjoins the river at the mouth of the valley coming from the Baroghil; nor were such likely to survive long on ground liable to inundation from the Oxus, flowing here in numerous shifting channels with a total width of over a mile.

Even if the exact position of Lien-yün thus remained undetermined, my short stay at Sarhad sufficed to convince me how closely local conditions agreed with the details of Kao Hsien-chih's exploit in crossing the Oxus. The river at the time of the summer flood must, indeed, present a very imposing appearance as it spreads out its waters over the wide valleybottom at Sarhad. But the very separation of the waters makes fording always possible even at that season, provided the passage takes place in the early morning, when the flood due to the melting snow and ice is temporarily reduced by the effect of the night's frost on the glaciers and snow-beds at the head of the Ab-i-Panja. The account in the Annals distinctly shows that the river passage must have been carried out at an early hour of the morning, and thus explains the complete success of an otherwise difficult operation.

I was able to trace the scene of the remaining portion of the Chinese general's exploit when, on May 21, I visited the ruined fortifications reported on the steep spur overlooking the debouchure of the Baroghil stream from the west and known as *Kansir*. After riding across the level plain of sand and marsh, and then along the flat bottom of the Pitkhar defile for a total distance of about 3 miles, we left our ponies at a point a little to the south of some absolutely impracticable rock faces which overlook Pitkhar from the west. Then, guided by a few Wakhis, I climbed to the crest of the western spur, reaching it only after an hour's hard scramble over steep slopes of rock and shingle. There, beyond a stretch of easily sloping ground and about 300 feet higher, rose the old fort of Kansir at the extreme north end of the crest. Between the narrow ridge occupied by the walls and bastions and the continuation of the spur south-westwards a broad dip seemed to offer an easy descent towards the hamlet of Karkat on the Oxus.

It was clearly for the purpose of guarding this approach that the little fort had been erected on this exposed height. On the north and east, where the end of the spur falls away in unscalable cliffs to the main valley of the Oxus and towards the mouth of the Pitkhar defile, some 1600 to 1700 feet below, structural defences were needless. But the slope of the ridge facing westwards and the narrow neck to the south had been protected on the crest by a bastioned wall for a distance of about 400 feet. Three bastions facing west and south-west, and one at the extreme southern point, still rose, in fair preservation in parts, to a height of over 30 feet. The connecting wall-curtains had suffered more, through the foundations giving way on the steep incline. Of structures inside the little fort there remained no trace.

Definite archæological evidence as to the antiquity of the little fortification was supplied by the construction of the walls. Outside a core of closely packed rough stones they show throughout a solid brick facing up to 6 feet in thickness with regular thin layers of brushwood separating the courses of large sun-dried bricks. Now this systematic use of brushwood layers is a characteristic peculiarity of ancient Chinese construction in Central Asia, intended to assure greater consistency under climatic conditions of particular dryness in regions where ground and structures alike are liable to constant wind erosion. My explorations around Lop-nor and on the ancient Chinese Limes of Tun-huang have conclusively proved that it dates from the very commencement of Chinese expansion into Central Asia.\* At the same time my explorations in the Tarim basin have shown also that the Tibetan invaders of the T'ang period, when building their forts, did not neglect to copy this constructive expedient of their Chinese predecessors and opponents in these regions.<sup>†</sup> On various grounds which cannot be discussed here in detail it appears to me very probable that the construction of the Kansir walls was due to the Tibetan invaders of Wakhan. But whether the fortification existed already when Kao Hsien-chih carried the Tibetan main position by an attack on its mountain flank, or whether it was erected by the Tibetans when they returned after the retirement of the Chinese some years later, and were, perhaps, anxious to guard against any repetition of this move outflanking a favourite defensive position, I am unable to say.

The victory thus gained by Kao Hsien-chih on the Oxus had been signal, and it was followed up by him with the boldness of a truly great commander. The Imperial Commissioner and certain other high officers feared the risks of a further advance. So Kao Hsien-chih decided to leave them behind together with over 3000 men who were sick or worn out by

\* Cf., e.g., 'Desert Cathay,' i. pp. 387 sqq., 540 sqq.; ii. pp. 44, 50, etc.

† This was distinctly observed by me in the Tibetan forts at Miran and Mazar-tagh, built and occupied in the 8th century A.D.; cf. 'Serindia,' pp. 457, 1285 sqq.

the previous hardships, and to let them guard Lien-yün. With the rest of his troops he "pushed on, and after three days arrived at Mount T'an-chü; from that point downwards there were precipices for over 40 li (circ. 8 miles) in a straight line. Kao Hsien-chih surmised : 'If the barbarians of A-nu-yüch were to come to meet us promptly, this would be the proof of their being well-disposed.' Fearing besides that his soldiers would not care to face the descent [from Mount *I'an-chü*], he employed the stratagem of sending twenty horsemen ahead with orders to disguise themselves in dress as if they were barbarians of the town of A-nu-yüeh, and to meet his troops on the summit of the mountain. When the troops had got up Mount T'an-chü they, in fact, refused to make the descent, saying, 'To what sort of places would the Commissioner-in-Chief have us go?' Before they had finished speaking, the twenty men who had been sent ahead came to meet them with the report: 'The barbarians of the town of A-nu-yüeh are all well-disposed and eager to welcome you ; the destruction of the bridge over the So-yi river is completed.' Kao Hsien-chih pretended to rejoice, and on his giving the order all the troops effected their descent."

After three more marches the Chinese force was in reality met by "the barbarians of the town of A-nu-yüch" offering their submission. The same day Kao Hsien-chih sent ahead an advance guard of a thousand horsemen, charging its leader to secure the persons of the chiefs of "Little P'o-lü" through a ruse. This order having been carried out, on the following day Kao Hsien-chih himself occupied A-nu-yüeh, and had the five or six dignitaries who were supporting the Tibetans executed. He then hastened to have the bridge broken which spanned the So-yi river at a distance of 60 *li*, or about 12 miles, from A-nu-yüeh. "Scarcely had the bridge been destroyed in the evening when the Tibetans, mounted and on foot, arrived in great numbers, but it was then too late for them to attain their object. The bridge was the length of an arrow-shot; it had taken a whole year to construct it. It had been built at the time when the Tibetans, under the pretext of using its route, had by deceit possessed themselves of Little P'o-lü." Thus secured from a Tibetan counter-attack on Yasin, Kao Hsien-chih prevailed upon the king of Little P'o-lü to give himself up from his hiding-place, and completely pacified the territory.

The personal acquaintance with the ground which I gained in 1906 on my journey up the Yarkhun, or Mastuj, valley and across to Sarhad, and again on my move up Yasin and across the Darkot in 1913, has rendered it easy to trace the successive stages here recorded of Kao Hsien-chih's great exploit. All the details furnished by the Chinese record agree accurately with the important route that leads across the depression in the Hindukush range, formed by the adjacent Baroghil and Shawitakh Passes, to the sources of the Mastuj river, and then, surmounting southwards the ice-covered Darkot Pass (*circ.* 15,400 feet), descends the valley of Yasin to its debouchure on the main river of Gilgit. The only serious natural obstacle on this route, but that a formidable one, is presented by the glacier pass of the Darkot. I first ascended it on 17 May 1906, from the Mastuj side, under considerable difficulties, and to a description of that visit and the photographic illustrations which accompany it I may here refer for all details.\*

Owing to a curious orographic configuration two great ice-streams descend from the northern face of the Darkot pass. One, the Darkot glacier properly so called, slopes down to the north-west with an easy fall for a distance of nearly 8 miles, pushing its snout to the foot of the Rukang spur, where it meets the far steeper Chatiboi glacier. The other ice-stream, which on the map is shown quite as long but which reliable information represents as somewhat shorter, descends towards the northeast and ends some miles above the summer grazing ground of Showarshur on the uppermost Yarkhun river. Thus two divergent routes offer themselves to the traveller who reaches the Darkot pass from the south and wishes to proceed to the Oxus.

The one, keeping to the Darkot glacier, which I followed myself on my visit to the Darkot pass, has its continuation in the easy track which crosses the Rukang spur, and then the Yarkhun river below it to the open valley known as Baroghil-yailak. Thence it ascends over a very gentle grassy slope to the Baroghil saddle, characteristically called *Dashti-Baroghil*, "the plain of Baroghil." From this point it leads down over equally easy ground, past the hamlet of Zartighar, to the Ab-i-Panja opposite Sarhad. The other route, after descending the glacier to the north-east of the Darkot Pass, passes down the Yarkhun river past the meadows of Showar-shur to the grazing ground of Shawitakh-yailak; thence it reaches the Hindukush watershed by an easy gradient near the lake of Shawitakh or Sarkhin-zhoe. The saddles of Baroghil and Shawitakh are separated only by about 2 miles of low gently sloping hills, and at Zartighar both routes join.

The distances to be covered between the Darkot pass and Sarhad are practically the same by both these routes, so far as the map and other available information allow me to judge. My original intention in 1906 was to examine personally those portions of both routes which lie over the *névé*-beds and glaciers of the Darkot. But the uncertain weather conditions prevailing at the time of my ascent, and the exceptional difficulties then encountered owing to the early season and the heavy snowfall of that spring, effectively prevented my plan of ascending from the foot

<sup>\*</sup> See 'Desert Cathay,' i. pp. 52 sqq. In 1913 I crossed the Darkot from the Yasin side towards the close of August, *i.e.* at the very season when Kao Hsien-chih effected his passage. The difficulties then encountered in the deep snow of the *névé* beds on the top of the pass, on the great and much-crevassed glacier to the north, and on the huge side moraines along which the descent leads, impressed me as much as before with the greatness of Kao Hsien-Chih's alpine feat in taking a military force across the Darkot.

of the Rukang spur and descending to Showar-shur. In 1913 I was anxious to complete my examination of the Darkot by a descent on the latter route. But my intention was unfortunately frustrated by the fact that the passage of the glacier on the Showar-shur side had been blocked for several years past by an impracticable ice-fall which had formed at its end.

Having thus personal experience only of the north-west route, I am unable to judge to what extent present conditions justify the report which represents the glacier part of the north-eastern route as somewhat easier. It is, however, a fact that the Pamir Boundary Commission of 1895, with its heavy transport of some six hundred ponies, used the latter route both coming from and returning to Gilgit. The numerous losses reported of animals and loads show that here, too, the passage of the much-crevassed glacier and the treacherous snow-covered moraines proved a very serious difficulty for the transport. Nevertheless, inasmuch as for a force coming from the Wakhan side the ascent to the Darkot pass from the nearest practicable camping ground would be about 1300 feet less by the Showarshur route than by that passing the Rukang spur, I consider it probable that the former was used.

Kao Hsien-chih's biography states that it took the Chinese general three days to reach "Mount T'an-chü," *i.e.* the Darkot, but does not make it quite clear whether thereby the arrival at the north foot of the range or on its crest is meant. If the latter interpretation is assumed, with the more rapid advance it implies, it is easy to account for the time taken by a reference to the ground; for, although the Shawitakh-Baroghil saddle is crossed without any difficulty in the summer after the snow has melted, no military force accompanied by baggage animals could accomplish the march from Sarhad across the Darkot in less than three days, the total marching distance being about 30 miles. Even a four days' march to the crest, as implied in the first interpretation, would not be too large an allowance, considering the high elevations and the exceptional difficulties offered by the glacier ascent at the end.

The most striking evidence of the identity of "Mount T'an-chü" with the Darkot is supplied by the description given in the record of "the precipices for over 40 li in a straight line" which dismayed the Chinese soldiers on looking down from the heights of Mount T'an-chü; for the slope on the southern face of the Darkot is extremely steep, as I found on my ascent in 1913, and as all previous descriptions have duly emphasized. The track, mostly over moraines and bare rock, with a crossing of a much-crevassed glacier *en route*, descends close on 5000 feet in a distance of little more than 5 miles before reaching, near a ruined "Darband," or *Chiusa*, the nearest practicable camping ground above the small village of Darkot.

Well could I understand the reluctance shown to further advance by Kao Hsien-chih's cautious "braves," as from the top of the pass I looked down on 17 May 1906 through temporary rifts in the brooding vapour into the seeming abyss of the valley. The effect was still further heightened by the wall of ice-clad mountains rising to over 20,000 feet which showed across the head of the Yasin valley south-eastwards, and by the contrast which the depths before me presented to the broad snowy expanse of the glacier *firn* sloping gently away on the north. Taking into account the close agreement between the Chinese record and the topography of the Darkot, we need not hesitate to recognize in  $T^{can-chii}$ an endeavour to give a phonetic rendering of some earlier form of the name *Darkot*, as accurate as the imperfections of the Chinese transcriptional devices would permit.

The stratagem by which Kao Hsien-chih met and overcame the reluctance of his troops, which threatened failure when success seemed assured, looks characteristically Chinese. The forethought shown in preparing this ruse is a proof alike of Kao Hsien-chih's judgment of men and of the extreme care with which every step of his great enterprise must have been planned. But such a ruse, to prove effective, must have remained unsuspected. I believe that in planning it full advantage was taken of the peculiar configuration of the Darkot, which provides, as seen, a double route of access to the pass. If the party of men sent ahead to play the rôle of the "barbarians of Little P'o-lü" offering their submission was despatched by the Baroghil and Rukang route while the troops marched by the Showitakh-Showar-shur route, all chance of discovery while on the move would be safely guarded against. As I had often occasion to note in the course of my explorations, Chinese military activity from antiquity down to modern times has always taken advantage of the keen sense of topography widely spread in the race. So Kao Hsien-chih was likely to take full account of the alternative routes. Nor could it have been particularly difficult for him to find suitable actors, in view of the generous admixture of local auxiliaries which the Chinese forces in Central Asia have at all times comprised.\*

The remaining stages of Kao Hsien-chih's advance can be traced with equal ease. The three marches which brought him from the southern foot of the pass to "the town of A-nu-yüeh" obviously correspond to the distance, close on 30 miles, reckoned between the first camping ground below the Darkot to the large village of Yasin. The latter, by its position and the abundance of cultivable ground near by, must always have been the political centre of the Yasin valley. Hence it is reasonable to assume that we have in *A-nu-yüeh* a fairly accurate reproduction of the name *Arniya* or *Arniah* by which the Dards of the Gilgit valley know Yasin.

The best confirmation of this identification is furnished by the state-

<sup>\*</sup> The T'ang Annals specifically mention in the account of Shih-ni, or Shighnan, on the Oxus that its chief in A.D. 747 followed the Imperial troops in their attack on Little P'o-lii, and was killed in the fighting ; cf. Chavannes, 'Turcs occidentaux,' p. 163.

ment of the Chinese record that the bridge across the River So-yi was situated 60 li from A-nu-yüeh. Since the notice of Little P'o-lü contained in the T'ang Annals names the River So-yi as the one on which Yeh-to, the capital of the kingdom, stood, it is clear that the Gilgit river must be meant. Now, a reference to the map shows that, in a descent of the valley from Yasin, the Gilgit river is reached at a distance of about 12 miles, which exactly agrees with the 60 li of the Chinese account. It is evident also that, since the only practicable route towards Gilgit proper and the Indus valley leads along the right, or southern, bank of the Gilgit river, the Tibetan reinforcements hurrying up from that direction could not reach Yasin without first crossing the river. This explains the importance attaching to the bridge and the prompt steps taken by the Chinese leader to have it broken. As the Gilgit river is quite unfordable in the summer the destruction of the bridge sufficed to assure safe possession of Yasin.\*

It still remains for us to consider briefly what the biography in the T'ang Annals tells us of Kao Hsien-chih's return from Little P'o-lü. After having secured the king and his consort and pacified the whole territory, he is said to have retired by the route of "the shrine of the red Buddha" in the eighth (Chinese) month of A.D. 747. In the ninth month (October) he rejoined the troops he had left behind at Lien-yüan, *i.e.* Sarhad, and by the end of the same month regained "the valley of Po-mi," or the Pamirs.

Reference to the map shows that there are only two direct routes, apart from that over the Darkot and Baroghil, by which the upper Abi-Panja valley can be gained from Gilgit-Yasin. One leads up the extremely difficult gorge of the Karambar or Ashkuman river to its headwaters east of the Yarkhun river sources, and thence by the Khora-bhort Pass over the main Hindukush range and down the Lupsuk valley to the Ab-i-Panja. This it strikes at a point close to Karvan-balasi, half a march below the debouchure of the Little Pamir and two and a half marches above Sarhad.<sup>†</sup> The other, a longer but distinctly easier route, leads up from Gilgit through the Hunza valley to Guhyal, whence the Ab-i-Panja headwaters can be gained either viâ the Kilik and Wakhjir passes or by the Chapursan valley. At the head of the latter the Irshad pass gives access to the Lupsuk valley already mentioned, and down this Karwanbalasi is gained on the Ab-i-Panja.<sup>‡</sup> All three passes are high, close on

\* The biography of Kao Hsien-chih calls this bridge "pont de rotin" in M. Chavannes' translation, 'Turcs occidentaux,' p. 153. But there can be no doubt that what is meant is a "rope bridge," or *jhula*, made of twigs twisted into ropes, a mode of construction still regularly used in all the valleys between Kashmir and the Hindukush. Rope bridges of this kind across the Gilgit river near the debouchure of the Yasin valley were the only permanent means of access to the latter from the south until the wire suspension bridge near the present fort of Gupis was built in recent years.

† Regarding Karwan-balasi and the route along the Oxus connecting Sarhad with the Little Pamir, cf. 'Desert Cathay,' i. pp. 72 sqq.

‡ The Hunza valley route was followed by me in 1900. For a description of it and

or over 16,000 feet, but clear of ice and comparatively easy to cross in the summer or early autumn.

Taking into account the distinct statement that Kao Hsien-chih left after the whole "kingdom" had been pacified, it is difficult to believe he should not have visited Gilgit, the most important portion of Little P'o-lü. In this case the return through Hunza would have offered manifest advantages, including the passage through a tract comparatively fertile in places and not yet touched by invasion. This assumption receives support also from the long time, one month, indicated between the start on the return march and the arrival at Lien-yün. Whereas the distance from Gilgit to Sarhad vià Hunza and the Irshad pass is now counted at twenty-two marches, that from Gilgit to the same place by the Karambar river and across the Khora-bhort is reckoned at only thirteen. But the latter route is very difficult at all times and quite impracticable for load-carrying men in the summer and early autumn, when the Karambar river completely fills its narrow rock-bound gorge.

The important point is that both routes would have brought Kao Hsien-chih to the same place on the uppermost Ab-i-Panja, near Karwanbalasi, which must be passed by all wishing to gain Sarhad from the east, whether starting from Hunza, Sarikol, or the Little Pamir. This leads me to believe that the "shrine of the red Buddha," already mentioned above as on the route which Kao Hsien-chih's eastern column followed on its advance to Sarhad, must be looked for in this vicinity. Now it is just here that we find the small ruin known as *Karwan-balasi*, which has all the structural features of a Buddhist shrine though now reverenced as a Muhammadan tomb.<sup>\*</sup> We have here probably another instance of that continuity of local cult which has so often converted places of ancient Buddhist worship in Central Asia and elsewhere into shrines of supposed Muhammadan saints.<sup>†</sup>

According to the Annals the victorious general repaired to the Imperial capital, taking with him in triumph the captured king Su-shihli-chih and his consort. The Emperor pardoned the captive chief and enrolled him in the Imperial guards, *i.e.* kept him in honourable exile,

of the Kilik and Wakhjir passes by which it connects with the Ab-i-Panja-valley close to the true glacier source of the Oxus, see my 'Ruins of Khotan,' pp. 29 sqq.

The branch of this route leading up the Chapursan valley and across the Irshad pass, was for the most part seen by me in 1913. The Chapursan valley is open and easy almost throughout and shows evidence of having contained a good deal of cultivation in older times; see my note in *Geographical Journal*, 48, p. 109. On this account, and in view of the fact that this route is some 18 miles shorter than that over the Wakhjir and crosses only one watershed, it offers a distinctly more convenient line of access to the Oxus headwaters from Gilgit than the former branch.

\* Regarding the ruin of Karwan-balasi, cf. 'Desert Cathay,' i. pp. 76 sqq. ; 'Serindia,' i. pp. 70 sq.

† For references, see 'Ancient Khotan,' i. p. 611, s.v. "local worship"; also my "Note on Buddhist Local Worship in Muhammadan Central Asia," Journal of the Royal Asiatic Society, 1910, pp. 839 sqq.

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safely away from his territory. This was turned into a Chinese military district under the designation of *Kuei-jên*, and a garrison of a thousand men established there. The deep impression which Kao Hsien-chih's remarkable expedition must have produced in all neighbouring regions is duly reflected in the closing remarks of the  $T^{c}ang-shu$ : "Then the Fu-lin (Syria), the Ta-shih (*i.e.* the Tazi or Arabs), and seventy-two kingdoms of divers barbarian peoples were all seized with fear and made their submission."

It was the greatness of the natural obstacles overcome on Kao Hsienchih's victorious march across the inhospitable Pamirs and the icy Hindukush which made the fame of this last Central Asian success of the T'ang arms spread so far. If judged by the physical difficulties encountered and vanquished, the achievement of the able Korean general deserves fully to rank by the side of the great alpine feats of commanders famous in European history. He, for the first, and perhaps the last, time led an organized army right across the Pamirs and successfully pierced the great mountain rampart that defends Yasin–Gilgit and with it the Indus valley against invasion from the north. Respect for the energy and skill of the leader must increase with the recognition of traditional weakness which the Annals' ungarnished account reveals in his troops.

Diplomatic documents reproduced from the Imperial archives give us an interesting glimpse of the difficult conditions under which the Chinese garrison placed in Little P'o-lü was maintained for some years after Kao Hsien-chih's great exploit. As I have had occasion to discuss this curious record fully elsewhere, it will suffice to note that the small Chinese force was dependent wholly upon supplies obtained from Kashmir,\* exactly as the present garrison of Indian Imperial Service troops has been ever since it was placed in Gilgit some thirty years ago.

In view of such natural difficulties as even the present Kashmir-Gilgit road, an achievement of modern engineering, has not succeeded in removing, it is not surprising to find that before long resumed Tibetan aggression threatened the Chinese hold, not merely upon Gilgit-Yasin, but upon Chitral and distant Tokharistan too. A victorious expedition undertaken by Kao Hsien-chih in A.D. 750 to Chitral succeeded in averting this danger.<sup>†</sup> But the fresh triumph of the Chinese arms in these distant regions was destined to be short. Early in the following year Kao Hsienchih's high-handed intervention in the affairs of Tashkend, far away to

\* Cf. 'Ancient Khotan,' i. pp. 11 sqq. ; for the official documents embodied in the 'Tsê fu yuan kuei' (published A.D. 1013), see Chavannes, 'Turcs occidentaux,' pp. 214 sqq.

In the former place I have pointed out the exact paralled which the difficulties experienced since 1890 about the maintenance of an Indian Imperial garrison in Gilgit present to the conditions indicated by the Chinese record of A.D. 749. The troubles attending the transport of supplies from Kashmir necessitated the construction of the present Gilgit Road, a difficult piece of engineering.

† Cf. Chavannes, 'Turcs occidentaux,' pp. 158, 214 sqq., 296.

the north, brought about a great rising of the populations beyond the Yaxartes, who received aid from the Arabs. In a great battle fought in July 751, in the plains near Talas, Kao Hsien-chih was completely defeated by the Arabs and their local allies, and in the ensuing *débâcle* barely escaped with a small remnant of his troops.\*

This disaster marked the end of all Chinese enterprise beyond the *Imaos*. In Eastern Turkestan Chinese domination succeeded in maintaining itself for some time amidst constant struggles until by A.D. 791 the last of its administrators and garrisons, completely cut off long before from contact with the Empire, finally succumbed to Tibetan invasion. Close on a thousand years were to pass after Kao Hsien-chih's downfall before Chinese control was established once again over the Tarim basin and north of the T'ien-shan under the great emperor Ch'ien-lung.

## THE MOUNT EVEREST MAPS AND PHOTOGRAPHS

 $T^{WO}$  maps are published with the present number of the *Journal* to illustrate the papers by Colonel Howard-Bury and Mr. Mallory, read at the joint meeting of the Society and the Alpine Club held at the Queen's Hall on December 20. Since both are preliminary and rather hastily made maps of hitherto unmapped country, it is necessary to explain, more fully than could be done on the face of the maps, the origin of each.

The survey party which, at the request of the Government of India, accompanied the expedition, consisted of Majors Morshead and Wheeler, two Indian plane-tablers, an Indian photographic assistant, and the necessary subordinates. Major Morshead and his plane-tablers mapped the whole country traversed by the expedition on the scale of 4 miles to 1 inch, with the exception of the area within about 10 miles of Mount Everest, which was reserved for photographic survey by Major Wheeler. A rapid triangulation was carried from the existing triangulation at Kampa Dzong (made by Col. Ryder on the Tibet Mission of 1903-04) as far west only as Tinki; from that place the plane-table sheets are based on intersected points determined by Col. Ryder. In the valleys to the extreme west of the area mapped, bad weather obscured all the summits and made plane-tabling impossible; the map in these districts depends on a rough time- and compass-traverse by Major Morshead.

Fair tracings of the plane-table sheets were kept up as far as possible during the progress of the work in the field, and were rapidly completed on the return to Darjeeling, so that within three weeks copies reproduced by the Vandyke process in six colours were available in Calcutta, and a

\* Cf. Chavannes, 'Turcs occidentaux,' p. 142, note 2. M. Chavannes, p. 297, quotes the closely concordant account of these events from Muhammadan historical records.