

RUSSIA, MONGOLIA, CHINA

Being some Record of the Relations
between them from the beginning of the XVIIth Century to the Death of the
TSAR ALEXEI MIKHAILOVICH

A.D. 1602-1676

Rendered mainly in the form of Narratives dictated or written by
the ENVOYS sent by the RUSSIAN TSARS, or their VOEVODAS in

SIBERIA

to the *Kalmuk* and *Mongol* KHANS & PRINCES ; and to the

EMPERORS OF CHINA

With

Introductions, Historical and Geographical

Also

A SERIES OF MAPS

showing the progress of *Geographical Knowledge* in regard to

NORTHERN ASIA

During the XVIth, XVIIth, & early XVIIIth Centuries

The Texts taken more especially from Manuscripts in the Moscow Foreign Office Archives

The Whole by

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The Russian Conquest of the Caucasus

IN TWO VOLUMES—VOL. I

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THE RENAT MAPS

NOTE.—“Renat 1” is the Kalmuk map of Sungaria; “Renat 2” the Kalmuk map of E. Middle Asia; “R.” is Renat’s own Swedish version of “Renat 1.” “B.” is the Linköping (Benzelstierna’s) copy of “R.” as seen in the Russian version of Mr. Maksheyeff and General Stubendorff.

RENAT 1.

IN 1734 a Swede, Artillery-sergeant Johan Gustav Renat, who had been taken prisoner at Pultava, exiled to Siberia, and there captured by the Kalmuks, came back at last to his native land, bringing with him two maps of Middle Asia that have since been known by his name. These maps had long disappeared from view when, in 1879, the celebrated Swedish poet and novelist, August Strindberg, announced his discovery, in the Library at Linköping, of a copy made by J. A. Benzelstierna, for Bishop Eric Benzelstierna (otherwise Benzelius), of one of them—the map of “Sungaria.” Much interest was aroused both in Sweden and in Russia. Strindberg sent a photograph of his “find” to the Imperial Russian Geographical Society in St. Petersburg, which entrusted to Mr. A. J. Maksheyeff the task of analysing and describing the map and to General O. E. Stubendorff that of reproducing it. It was quite forgotten on both sides that Renat’s map in Swedish was taken by him from a Kalmuk original, in his possession, the authorship of which he had expressly disclaimed. Of a second map nothing was said.

The Renat-Benzelstierna version (B.)

The result was an article by Mr. Maksheyeff and a map by General Stubendorff, both of which are open to considerable criticism.¹ Messrs. Maksheyeff and Stubendorff’s want of accuracy may, indeed, be excused to a great extent on the score that they were dealing through a poor photograph with a copy of a copy of the Kalmuk original, and in so doing were, to the best of their ability, carrying out the behest of the I.R.G.S. But one wonders why this should have been so—why no one was sent to glance, even, at the Linköping copy, or enquire in Sweden as to the existence of an original. When, a dozen years later, this was found and, with it, not only Renat’s own Swedish version, but a second Renat map of Middle Asia, again no adequate steps were taken to deal with these important documents, the existence of which had once been well known in Russia, though Mr. Maksheyeff wrote a brief notice of them.²

The Russian version of 1881, from B.

In the I.R.G. Society’s Library in Petrograd there are several large photographs of these Kalmuk maps and of the Swedish versions of them, but, apparently, no record of their provenance. In the University Library at Uppsala I was able to make this matter clear; for there they have the same photographs duly inscribed as having been taken by or for the Society and presented to the Library by Monsieur J. Zinovieff, Russian Minister in Stockholm, on 16th August 1893. It seems a pity that, again, Russia should have been content with the possession of nothing better than photographs, from which it is difficult, indeed, to get any true idea of the maps themselves; but, in the circumstances, it is not surprising that Mr. Maksheyeff’s article, and the accompanying map, do scant justice either to the original Kalmuk map or to Renat’s Swedish version of it.

Mr. Maksheyeff begins by calling attention to the faulty latitudes and longitudes on

¹ Article and map were published separately in 1881. In 1888 they reappeared in the *Zapiski (po obshch. Gheogr.)* of the I.R.G.S. vol. xi. ² *Izv.*, I.R.G.S. vol. xxvii. pp. 582 sq. (1891).

THE RENAT MAPS.

B., but rightly guesses that they are not Renat's own work. In point of fact they are to be found neither on R. nor on Renat 1, and were, presumably, added by Benzelstierna.

But it is remarkable that Mr. Maksheyeff and his colleague, a distinguished cartographer, failed to notice that the figures written on the margin of their photograph of the Benzelstierna or Linköping copy, are doubled; that is to say, that while latitude 41° N. is approximately correct, all other figures for latitude represent not one degree each in succession north and south of 41° , but two degrees each. Thus 40° should be 39° , 42° should be 43° , and so on. In the same way, longitude $105^{\circ} 40'$ (E. of Ferro = 88° E. of Greenwich) being approximately correct, $104^{\circ} 40'$ should be $103^{\circ} 40'$, $106^{\circ} 40'$ should be $107^{\circ} 40'$, and so on. Parallels drawn east and west (*a*) somewhat below Ak-su, and (*b*) through Zaisan-nor will then be 41° and 48° N. latitude respectively instead of, as at present, 41° and $44^{\circ} 30'$. The lines of longitude at W. end of Issik-kul and E. end of Zaisan-nor will be $93^{\circ} 50'$ (correct) and $102^{\circ} 20'$ (for $102^{\circ} 10'$) E. of Ferro instead of $99^{\circ} 45'$ and 104° , respectively, as now. In short, the latitudes and longitudes of Renat's map as regards Sungaria proper will be nearly correct instead of being the absurdity condemned by Mr. Maksheyeff—so correct, indeed, as to suggest more or less scientific methods of measurement. Much more serious is it that the parallels on B. are straight instead of curved, the resultant errors becoming very noticeable towards the N. on either side of the map. I give a corrected graticule on my key-map.

The scale of the map B. works out at 1 : 2,600,000, or 1 inch = 41 statute miles; the scale of the original map, Renat 1, is approximately 1 : 1,600,000, or 1 inch = 25.2 miles. Renat adds to the Kalmuk map the boundaries of Sungaria and of the neighbouring dominions, within the limits of the map. He shows Hami as belonging to China—correctly, as we shall see;¹ but Turfan he places well within the Sungar border-line. Mr. Maksheyeff, after quoting a passage from Unkovsky,² not from the original but from Ritter's description of Eastern Turkestan, endeavours to prove that Renat was wrong by adducing the fact that in 1732 the rulers of both Hami and Turfan were removed by the Chinese with their subjects to Gua-chow "because they could no longer bear the cruelties of the Kalmuks"—an incomplete argument, surely, for Chinese dominion over Turfan. Curiously enough we have absolutely contemporary evidence that the Kalmuks at this very time re-peopled Uch with a population brought from Turfan—hence, indeed, the name it has borne ever since, Uch-Turfan.³ Evidently Turfan was a bone of contention between Chinese and Kalmuks, and when Renat, in 1733, left Sungaria the town must have been completely depopulated. But he was, no doubt, fully justified in putting the border-line east of Turfan.⁴

In attempting to correct Renat in regard to the river Khobok, Mr. Maksheyeff himself falls into Bichurin's (Father Hyacinth's) glaring mistake of making the Khobok the upper water of the river Cherga, which flows into Zaisan-nor! Renat, according to his Russian critic, makes the equally bad mistake of treating the Khobok as the upper

¹ Page clxxv.

² *Posolstvo*, etc., I. Unkovsky, St. Petersburg, 1887.

³ See p. clxxxii. Uch-Turfan was formerly Uch-Ferman, as on the map of Pétis de la Croix, Paris, 1722, illustrating *L'Histoire de Timour-Bec*. Strahlenberg in 1730 has Utschferment; Delisle, 1706 and 1723, Outchferman.

⁴ Hami has ever been the meeting-place of opposed religions as well as the prize and the victim of warring races. It changed hands, we know, four times between 1679 and 1716 (see p. clxxv, n. 1). Long before that, as Yule tells us, Shah Rukh's envoys, in A.D. 1420, proceeded from Yulduz to Turfan, "where the people were mostly Buddhists, and had a great temple with a figure of Sakya Muni. From Turfan they reached Kara Khoja and five days beyond this were met by Chinese officials who took down the names of the envoys and the number of their suite. Seven days later they reached the town of Ata-sufi (a name which does not seem to occur elsewhere), and in two marches more Kamul (Hami) where they found a magnificent mosque and convent of Dervishes in juxtaposition with a fine Buddhist temple" (*Cathay*, cc). Ata-sufi is evidently the Astak (Astané) of Renat 2. Potanin tells of Hami being sacked once and again by marauding bands, especially in 1869. For previous history of Hami (fifteenth and sixteenth centuries) see Bretschneider's *résumé* (*M.R.* ii. 193).

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stream of the Imil. But this again is Maksheyeff's own mistake, he being misled by the Swedish photograph; it occurs neither on R. nor on Renat 1. The photograph, too, is responsible for the omission or merest indication on the Russian map of the river Aras (Aris), these last two errors being duly noted in Mr. Maksheyeff's second paper. On the other hand Renat is himself responsible for the actual joining of Ebi-nor to Sairam-nor by a "non-existent" river; but the mistake is a very pardonable one, as a glance at the Kalmuk map will show us; for, there, a river is seen flowing from *near* the east side of Sairam-nor, which by mistake is coloured green not blue, to Ebi-nor, and the black outlines of the hills admit the presumption that the junction is complete. Moreover, Mr. Douglas Carruthers tells us¹ that the basin of Sairam-nor (it appears) "once drained to the Ebi-nor basin on the Dzungarian plains below." So that the river in question in all probability did exist at some former time, when the level of Sairam-nor was higher than now and the screes and shingles, that bar the way to Ebi-nor in modern times, lower.

The mistake made in putting Barkul lake and city south of the Tian-Shan is a bad one—and for this, too, Renat is responsible. It arose, probably, in this way. On the Kalmuk original there is a circle, like others used to represent towns, between Turfan and Hami, but without any inscription. It was meant, no doubt, for Chiktama or Bizan (Pichan). Renat, who, as far as we know, had never been near Barkul, seems to have taken this circle for the site of Barkul city and lake, though he had already put the name Barkul on the north (the proper) side of the Tian-Shan. On the other hand Mr. Maksheyeff failed to notice that Renat misapplied the name "Chasch" [Khash] to an affluent of that river. In saying that Renat "without doubt" inscribes E. Turkestan with the name Kottoner after the town Khotan, his Russian critic makes, I think, the error of restricting a general term to a particular. Later, he finds fault with Renat for distinguishing between the Kirghiz and the Buruts; but Renat's distinction is the very proper one between the "Kirgis Kasak eller Kasakski Horda" and the "Bruther Kirgiser." As to "What people were the Kossiauti remains unexplained, as likewise the meaning of the inscription Schidam"—the identity of the latter with Tsaidam might have been guessed; the failure to recognise the Khoshotes is inexplicable. The "Kuchi" "to which Hami is shown as belonging" Mr. Maksheyeff takes to be "the Chinese province of Kuku-nor"—I believe without reason. The word is written north and east of the Tian-Shan and appears to represent the Central Gobi. Finally, Renat's omission of Manas and Urumtsi² is no proof of his ignorance, as Mr. Maksheyeff states; for these names are omitted on the Kalmuk original, where, however, Urumtsi and a neighbouring town (? Divanghi) are marked by circles, which on the Maksheyeff-Stubendorff map are converted into lakes!

The map Renat 1.

As to the origin of the map, Renat tells us categorically that the Kontaisha (Galdan Tseren) "made it himself."³ This might, possibly, mean no more than that he gave orders for the making of it; but we have no right to assume that such was the case. We have seen something of the cultivated side of life in the Middle Asian deserts and oases; and a Kalmuk prince who habitually carried with him, from camp to camp, a hundred camel-loads of books, as Galdan Tseren did,⁴ may well have been able to draw a map himself. In any case he would have with him many men of education and learning, not only of his own tribe or nation, but more especially amongst his Russian, Swedish, Manchu, and Chinese prisoners, the last two including, possibly, some of the trained surveyors sent out far and wide by the Jesuits at Kang-hi's behest for the very purpose of mapping the outlying parts of his vast dominions.

¹ *Unknown Mongolia*, Appendix B.

² According to Klapproth the modern representative of *Bish-balik*, "Pentapolis," which lay between Karakorum and Almalik.

³ See p. clxxviii.

⁴ Müller, *De Scriptis Tanguticis*, in Pallas, *Samlungen*, ii. 152; Abel Rémusat, *Recherches sur les langues Tartares*, p. 229. Cf. Note C, p. li, *ante*.

THE RENAT MAPS

Even with such help it is not very easy to believe in a Kalmuk origin of the map. On the other hand, if we question the accuracy of Renat's statement, we are left with two alternatives and two only—a Russian or a Chinese origin; for Renat's story and all we know of him preclude the possibility of his own authorship, so hastily assumed by Strindberg, so blindly accepted by others; and, indeed, a glance at Strahlenberg's map gives us the measure of what could be hoped for, at best, from the Swedish prisoners in Siberia, in so far, at least, as regards Sungaria.

To take Russia first. Time was when I held that the map Renat I might be derived from a missing map by a certain Filisoff, about whom more presently, or from work of his which preceded his map. But although—as will appear—a connection between them is practically certain, I can hardly, on reflection, allow that Filisoff or any Russian topographer of that day either did make or could have made this map. We have only to look at Unkovsky's map of 1724 and Zinovieff's of 1727¹ to convince ourselves of this truth. Moreover, Filisoff could have had no opportunity for surveying, even in the crudest fashion, the country off his line of march. Much of the information he obtained and inserted on his map must necessarily have been derived, directly or indirectly, from the Kalmuks; possibly to a large extent from the very map we are discussing. Moreover, seeing that Filisoff and Renat, as I shall show, must have left Sungaria together, it is difficult to believe that had the map originated with the former the Russians would have remained ignorant of the fact, or Renat have deliberately concealed it, giving all merit to the Kontaisha.

Coming now to China. Having, perforce, abandoned all idea of a Russian or Swedish origin I reverted to my earliest notion, namely, that the map must have had a Chinese original, though Renat, in this respect, so clearly distinguishes between it and Renat 2, and so positively asserts that Galdan Tseren made it himself. But the Manchu rulers of China in the seventeenth and eighteenth centuries, though their own subjects were by no means unskilled in map-making, acknowledged in most unequivocal fashion—by constantly employing them—the superiority in this respect of the Jesuit Fathers; and so completely did the latter dominate Chinese cartography at this time that a Chinese original of Renat I independent of their labours is hardly to be thought of. Nevertheless, a careful examination of their maps and records yields no hints of any connection between it and them.

I have relegated to a Supplementary Note a mass of interesting information on this subject, from which it results, to begin with, that the Jesuits under Kang-hi (from 1711 to 1716) mapped Middle Asia as far west as "the Hami district," of which achievement we have the record not only in d'Anville's Atlas of 1735, but in the map they presented to their employer in 1718, of the western portion of which—all that concerns the present argument—there exists a copy in the British Museum.² This map proves that west of Hami and of Ubsa-nor their knowledge was almost *nil*, and that, consequently, their surveys in the days of Kang-hi can have had nothing whatever to do with the making of Renat I. Later, in 1756, long after the Renat maps had reached Uppsala, other Jesuits, Rocha and Espinha, surveyed the central portion, at least, of Sungaria and produced a map that has never been published in Europe and doubtfully in China, though the contents must, assuredly, have been embodied in the great general map to which we now come. In 1759-60 the same Fathers journeyed through Chinese and part of what is now Russian Turkestan, as far west as Tashkent—perhaps farther—mapping as they went. Their map of the country of the Eleuts is said to have been republished at Uchang in 1864. I have not succeeded in finding any version of this map, but, again, it was, undoubtedly, incorporated in the "Map of the whole Empire of China" (*Ta tsing*

The Kang-hi Jesuit maps.

The Kien-lung Jesuit maps.

¹ Reproduced on a small scale by M. Gaston Cahen in *Nouvelles Archives*, etc. I examined the original in the Moscow Archives.

² See p. clxxxvi.

A Portion
of the

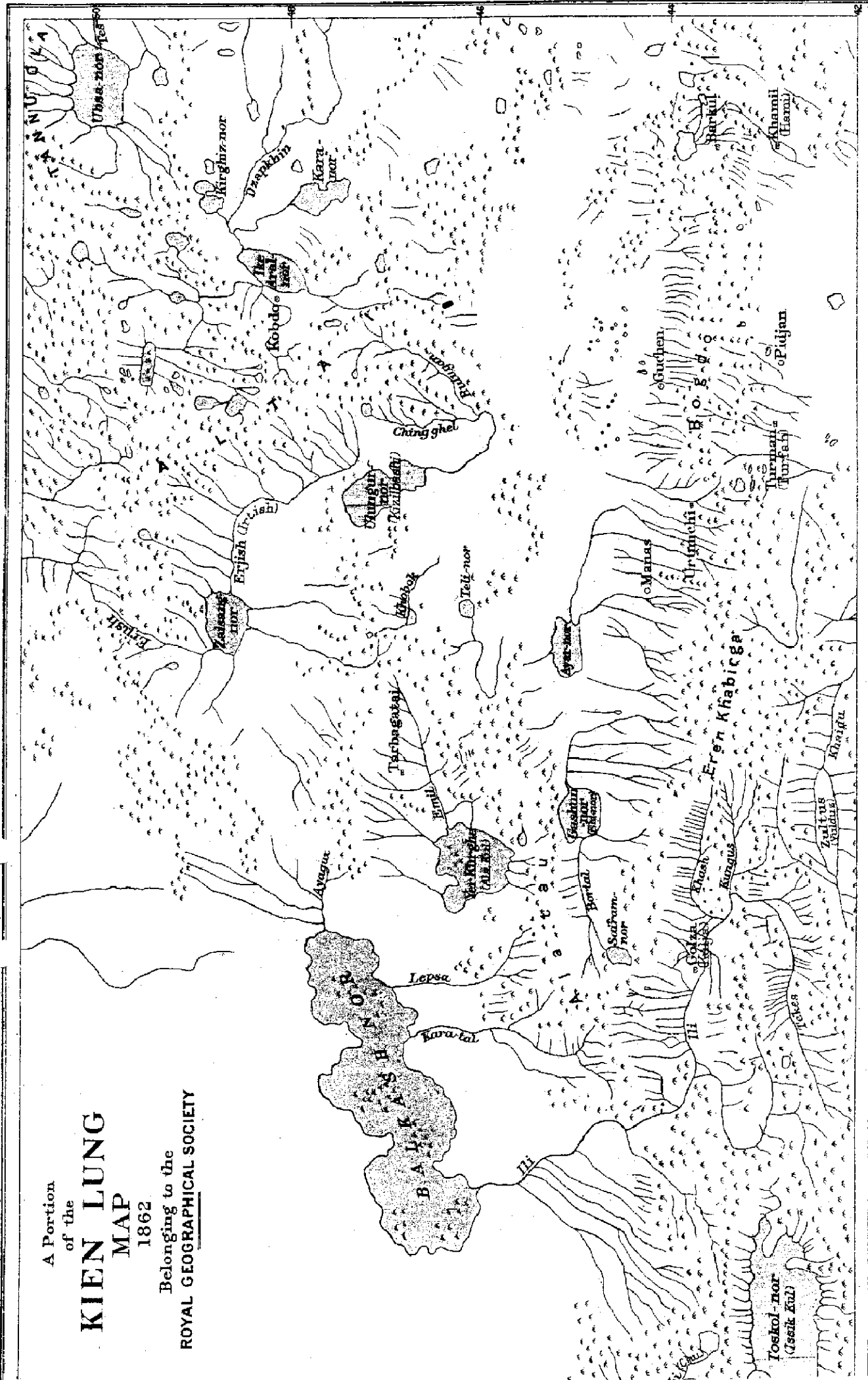
KIEN LUNG

MAP

1862

Belonging to the

ROYAL GEOGRAPHICAL SOCIETY



GEOGRAPHICAL INTRODUCTION

yeh tung yu 100) printed by order of Kien-lung in 1760 or 1761, of which a splendid example on ten rolls, each 27 feet long, is in the Library of the India Office. The names on this, as on the Kang-hi map, of which, properly speaking, it is a revised and extended edition, are in Chinese characters inside the Wall (and along its outer edge), but in Manchu in all outlying districts and regions—Manchuria itself, Mongolia, and all Northern and Central Asia. Fortunately, for those who cannot read either language, it is accompanied by a volume containing an English transcription, with reference numbers repeated on the map itself, of all the thousands of Manchu names and a large number of those in Chinese—this invaluable work having been done for the Hon. East India Company at some time previous to 1844 by Mr. W. Huttman, who in that year wrote a paper on this and other Chinese maps, for the Royal Geographical Society.¹ The latter in their map room possess a version of this Kien-lung map, in book form, published in 1862 by King-Liang-lo, acting viceroy of Hu-peh. This map I take to be a collateral, not a lineal descendant of the India Office version, from which it differs considerably. It embodies, no doubt, some later information and also some corruptions; but certain differences are due, possibly, to the fact that Kien-lung had had versions printed on different scales and otherwise not quite identical, of which the R.G.S. map represents one, the India Office map, I think, the other. Of the former I reproduce, in sketch-form, so much as concerns Sungaria proper—not the Sungarian dominions as a whole. It will be seen that it contains, for the time, a very fair representation of the country in question, in considerable detail. From the India Office version I reproduce enough to illustrate the divergence regarding the important and difficult region of Sairam-nor, the Borotala river and the Sungarian Gates, with especial reference to the following remarkable facts.

Klaproth's map.

In (?) 1836 Klaproth published a large map entitled *Carte de l'Asie Centrale dressée d'après les cartes levées par ordre de l'Empereur Khian Loung par les missionnaires de Péking et d'après un grand nombre de notions extraites et traduites de livres chinois par M. J. Klaproth*, Paris (no date on the R.G.S. copy). This map, of which I give the corresponding portion, likewise in sketch-form, might be expected to embody the whole of the information obtained by the Jesuits under Kang-hi and Kien-lung, or, when it differed from them, to furnish an improved version. Yet, on the contrary, it contains errors too gross—I speak only of Sungaria—to charge the Jesuits with; errors that are not to be found either on the Chinese maps of 1761 or 1862, or upon the Kalmuk map Renat 1. Mr. Delmar Morgan noticed that this map of Klaproth's reduced L. Balkash by one-third of its actual size and erroneously showed a considerable extent of marshy country to the north;² but he failed to call attention to much worse blunders, nor am I aware that, hitherto, they have attracted attention. They include the following, with which may be contrasted the comparative correctness of Renat 1. I give, as far as possible, the same names on all the three sketch-maps, to facilitate comparison.³

The river Ayaguz on Klaproth's map, as on the Chinese map, starts from the Tarbogatai Mountains south of $46^{\circ} 30'$ and runs north to *c.* $47^{\circ} 25'$; it then turns south-west and almost immediately loses itself in imaginary marshes at the northern end of Balkash-nor. In Renat 1 the Ayaguz starts, correctly, in the mountains due west of Zaisan-nor and flows southwards to Balkash-nor.

On Renat 1, Klaproth, and the Chinese map the general shape of Ala-kul differs greatly. Apparently all are wrong, Renat 1 not more than the others. None of them has Sassik-kul, though Klaproth adds that name to Ala-kul. But Klaproth alone makes the monumental error of entirely shutting off Ala-kul from Balkash-nor by a great chain of mountains joining the Tarbogatai to the Ala-tau. The Chinese map brings the foothills

¹ *Journal*, vol. xiv., 1844.

² Prjevalsky's *Kulja to Lob nor*, p. 174.

³ The variations "darya" "Kerya" on Map 22 will create no difficulty.

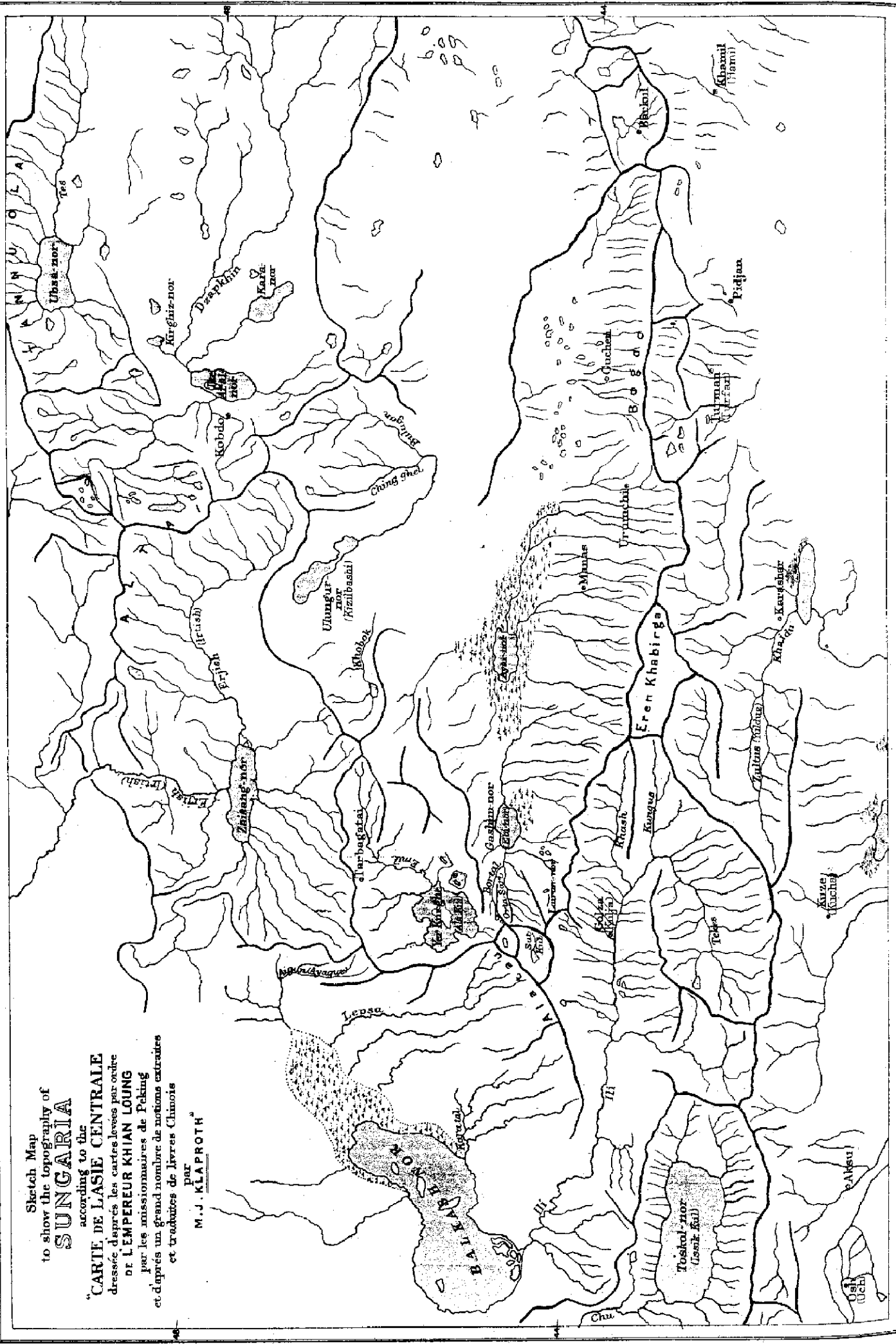
Sketch Map

to show the topography of

SUNGARIA

according to the
"CARTE DE L'ASIE CENTRALE
DE L'EMPEREUR KHIAN LOUNG
par les missionnaires de Peking
et d'après un grand nombre de notions extraites
et traduites de livres Chinois

par
M. J. KLAPROTH



Ust
(Uch)

Aksau

Kuze
(Kucha)

Kharak

Fidjan

Kharak
(Hami)

Toskol-nor
(Usak-kai)

Chu

Fren Khabirga

Bosh

Kashan

Kash

Kungu

Munas

Trunshih

Guchen

Robdo

Karfa-nor

Dzaphka

Kirghiz-nor

Leuse

Gaslan-nor

Ulungur-zam
(Kizilbasai)

Uzbeks

Uzbeks

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Baikal

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THE RENAT MAPS

of the Tarbogatai southwards to a little below the level of the northern end of Balkash-nor, but no farther. Renat 1, quite correctly, shows a total absence of elevated ground between the two lakes.¹

On Klaproth's map, again, as Ala-kul from Balkash so is Ebi-nor shut off from Ala-kul by mountain ranges, which are to be found neither in reality nor on Renat 1. The Sungarian gates, one of the most notable features of all Central Asian geography, are simply non-existent, unless we admit as such a gap quite wrongly left in the mountain chain at the head of the Borotala, nearly due W., instead of N.W. by N., of Ebi-nor. Sairam (written Lairun) -nor is well shown, but occurs again under its other name, Sut-kul (Milk-lake), hedged round with mountains and with a river running into it from the E. The name "Oluk Sart," evidently the Orta Sari of the 40-v. map, is attached to the Borotala itself. Further, on Klaproth's map the Ala-tau range, as already stated, is carried northward, west of Ala-kul, to join the Tarbogatai mountains. It should terminate at a point midway between Ala-kul and Ebi-nor, as it does correctly on Renat 1.

The Manas river is clearly shown on Renat 1, though not named; but the town of Manas is omitted. The patch to the E. of the river, if intentionally tinted blue, and therefore meant to represent water, must refer to the great tangle of marshes and streams shown on the 40-v. map to the E. of Manas. In this region Klaproth, following the Chinese map, has a distance of two whole degrees between the head-waters of the rivers Kash and Manas, though in reality they have, as on Renat 1, a narrow and common watershed.

When we come to examine the lower portion of Renat 1, and compare it with the corresponding regions of Klaproth and the modern map, we find notable differences.

Assuming still that 41° N. latitude and $105^{\circ} 40'$ E. longitude (from Ferro) are correct on B., and taking positions on Sir Aurel Stein's map of 1911 for comparison, we find that the Khaidu, a name which stands for the Khaidik, Khaidu, or Kharashar river of modern maps, and also—Lake Bagrach being ignored—for the river Kunche, flowing thence to Lob-nor, has its sources fairly in place, E. and W.; but Kuze (Kuchá), Aksu, and Osh (Uch-Turfan) are brought eastwards about 1° , $1^{\circ} 30'$, and $1^{\circ} 15'$ respectively. Ferghana follows suit, and, indeed, is pushed, relatively, still farther eastward, so that Kashgar is actually 4° out of place, Yarkand over 3° , Khotan nearly 3° , and Keria 2° ; and this is only partially accounted for by the fact that Yarkand is obviously misplaced, on the Khotan-daria, with the result that Khotan and Keria are also on the wrong rivers. On the other hand, Turfan, Barkul, and Hami are c. 2° , 5° , and 4° too far west. Moreover, the whole of this lower portion of the map is brought northward to the extent of from $0^{\circ} 34'$ (Uch-Turfan) to $1^{\circ} 45'$ (Kashgar). It is possible that, to a large extent, this was done deliberately, for the purpose of bringing these far distant parts of the Sungar dominion into a map, or on to a sheet of paper of given dimensions; but, also, the material at hand was, doubtless, inferior. On Klaproth's map, which dates from 1836 instead of, at latest, 1733, we find the Yarkand-daria and all that belongs to it thrust away westward, much as on Renat 1, in the opposite direction; Uch-Turfan, for instance, $1^{\circ} 21'$ and Kashgar $2^{\circ} 04'$ to the west of their true positions, the truth being that, as Yule showed in 1866 (*Cathay*, ccxxxii), the longitudes of the cities in Chinese Turkestan were hopelessly wrong.

Klaproth's gross errors are the more remarkable in view of his furious and, in some respects, merited onslaught upon Arrowsmith, whose treatment of the Sungarian mountains he loftily dismisses as follows: "Je ne fais pas un reproche à M. Arrowsmith de ce qu'il a très-mal indiqué la direction des chaînes des montagnes de la Petite Boukharie, du pays des Kalmuks et de celui des Dzoungar [as though the Dzoungars were not Kalmuks]; les matériaux qu'il avait à sa disposition ne pouvaient l'instruire convenablement sur ce

¹ A map entitled "Neu berichtigte charta von dem Lande der Kirgisen, etc.," in *Bibliothek der neuesten und wichtigsten Reisebeschreibungen*, M. C. Sprengel, Weimar, 1804, Band 14, has the Tarbogatai starting from Zaisan-nor to encircle Ala-kul on the west, as in Klaproth's map.

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point. . . . Les monts à l'ouest de ce dernier lac [Alak-kul] sont nommés dans les cartes Russes *snejniye* ou *neigeuses*; Arrowsmith prend cet adjectif pour leur nom propre," which was exceedingly wrong of Arrowsmith; but surely a mere trifle compared to the fact that the mountains themselves, so elaborately drawn on Klaproth's own map, never existed!¹

Klaproth's veracity has been rudely questioned before in regard to various matters. A careful examination of his great map of Asia will, it seems, deal another heavy blow at his credit and class him definitely, in quality of map-maker, as already in other respects, amongst the *traditori*.

The Kien-lung map could, of course, have nothing to do with the genesis of Renat 1 except in so far as it embodied, as no doubt it did, information contained in earlier maps. But, for Sungaria, it appears, no such information existed, and this is borne out by the statement of Father Souciet as to how he determined the position of Harcas and other places in that part of the Käng-hi map.² We have therefore no option but to conclude that Renat spoke the literal truth, and that Galdan Tseren, with what help he could command, made the map himself.

Key-map to Renat 1.

Of Renat 1 I give a facsimile reproduction, reduced, with a key-map sketched from it but having the international boundaries and various miscellaneous information added from R., and the 238 Kalmuk names inserted in English. I also give a Table containing in parallel columns a complete Russian transcription of the same names, made for me, directly from the original Kalmuk, by Mr. Anatole Bordzinkévich; my own English transcription from Mr. Bordzinkévich's Russian; the names in their Swedish forms upon R. and B. respectively; besides Mr. Maksheyeff's variations (mistakes) and many of his identifications. To all this I add Mr. Bordzinkévich's notes, his remarks on the Kalmuk script, and, finally, those elucidations and identifications I have, myself, been able to contribute. R. and B. I do not reproduce—there are limits to what one can do in this way, and in any case the war interferes. Moreover R. has already been reproduced by Dr. Sven Hedin,³ and B. by the I.R.G.S., and in Petermann's *Mitteilungen*, 1911, vol. 57, i. Heft 2. If these versions are not to hand my key-map must do, though the outlines on it are only roughed in.

I missed seeing B. (in the original), by a day or two only, owing to the outbreak of war; but Maksheyeff's version, however imperfect, enables us to tell pretty well wherein it differs from R. These differences I will now explain.

Comparison between Renat 1, R. and B.

On R. there is a broad, much-faded red border-line up the dotted line from east of "Samarchan" to the "Aras" and down the course of that river to edge of map. On B. this must be much stronger in colour to account for its blackness in the photograph, which led to the omission, already mentioned, of the river Aras (Aris) on Maksheyeff's map. With the border-line on the river Talas I deal elsewhere.⁴ The same faint red line runs on R. from between "Barkul Öde," and Barkul city and lake, down to the "Amandaria." The red boundary enclosing the Sungar dominions is much stronger. The Russian border is light green from "Cha Irzish" to where the Irtysh leaves the map. "Badakshan" has a green border; so also has "Kesmirer" and "Garriker," while "China" has faint yellow from "Lob Nor" to the "Cha Irzish" and rather stronger yellow, on dotted lines, below "Chamil" and below "Bologan."

B. has the degrees of latitude and longitude figured round the edging but no lines drawn. I have dealt with this matter already.

In both R. and B. an elaborate forest is shown with the label *I denna skog finns willa* (in B. *willda*) *Kameler*, "In this forest there are wild camels"; and on B. the name

¹ *Mémoires relatifs à l'Asie*, I. iii. Paris, 1828.

² See p. clxxxviii.

³ In *Svar på "Tal"*, Stockholm, 5th thousand, 1910, much reduced. The same map on a larger scale has now been published in Dr. Sven Hedin's *Southern Tibet*, Stockholm, 1917, vol. i.

⁴ See p. cxcix, note 1.

THE RENAT MAPS

"Carangoi" is written across it.¹ Dr. Sven Hedin in his pamphlet *Svar på "Tal,"* an answer to Strindberg who had attacked him incidentally in an "*Address to the Swedish Nation,*" points out that if there is one kind of place that wild camels would avoid it is a forest. Now this particular forest is not to be found on the Kalmuk map (Renat 1), nor are camels mentioned there. Nevertheless, wild camels do exist in those districts, and Dr. Sven Hedin was struck by the fact that, apparently, a Swede had knowledge of them over 200 years ago, until I showed him that on Witsen's map of 1687, in the same region, there was the legend, in Dutch, *Här valle veel kamelen,* "Here occur many camels." It may be conjectured that Renat had Witsen's map before him when making his Swedish transcription, and, misreading the Dutch, in pure ignorance added the forest; or, it may be, the forest grew from the word Karangoi.

That wild horses inhabited the same region we learn from Unkovsky who, in his Journal under date October 12, 1723, writes: "Camped for the night by the river called Ur-er. In the steppe we saw the dust raised by wild horses and were no little alarmed, and ranged the camels in two ranks, and drove our horses in between them. The Kalmuks of the convoy put on their mail-coats and, some of them, 'tighiliaki'² and arranged themselves, after their fashion, twenty or less men in a row; and in this way crossed the steppe, sending in advance a reconnaissance of twenty men, well mounted. But all they saw was wild horses." This was two days north of the river Emil.

In both Swedish versions the name "Bolugan" is attached to a lake, which is not figured on Renat 1, instead of to the river to which it properly belongs. On the other hand, Sairam-nor is shown most distinctly as a lake on R. and B., whereas on Renat 1 it is difficult to distinguish it from the neighbouring mountains. It is not named on any of these maps.³ Such corrections as this show that Renat had independent knowledge of his subject and was not just blindly following his Kalmuk original. "Shantash" is a lake on B. though Maksheyeff, in his text, correctly calls it "the name of mountains." There is, indeed, an isolated mountain mass at this spot on Renat 1 which Messrs. Maksheyeff and Stubendorff took for a lake. A space south of Keria, outlined but neither named nor coloured blue on Renat 1, is shown as a lake on R. Another similar space south of Gasnor is shown clearly as a lake on both R. and B. Here, again, Renat must have had outside knowledge—the last-mentioned feature represents, apparently, the two lakes *Niezamerzayushche* ("non-freezing," though at an altitude of 13,330 feet) and *Chan Kum Kul*, of Kozloff's map. The first-mentioned space or lake may be one of several sheets of water in or near the eastern extremity of the Karakorum range.

To continue the comparison between Renat 1, R. and B.—R. has Son Kūl as a double lake with no outlet. B. has the name "Sonkul," but the double lake of R. becomes part of the mountains. Renat 1 has Sonkul with the name in Kalmuk written across it, confusing its outline; and this, no doubt, gave rise to Renat's idea of two lakes. The river connecting it with the Narin to the south-east is duly shown. For Sirsek, B. has "Sir = k"—probably the photograph was to blame. R. and B., though they have the names Choschol and Charachosy, representing Kochkar and Karakojur, omit altogether the rivers themselves. They give only the northern source of the Chu, the Yeke Kemin

¹ Karangoi means "foggy," "misty." See Ritter's *Vost. Turkestan*, p. 83; but perhaps Renat meant Karagai, pine-trees.

² *Teghilyai*, a kaftan with standing collar, heavily quilted for use as armour.

³ Sairam-nor is also known as Zut-kul or Milk-lake. Gerhard Friedrich Müller, in his *Sammlung russ. Geschichte*, has an abstract of Unkovsky's account of the Kalmuks in which he makes the death of Ochirtu (Tsetsen Khan) take place at Zaisan-nor instead of at Sairam-nor as it actually did. Howorth is misled by Müller. (See Müller vol. i. p. 126; Howorth p. 622; Unkovsky (Russ. ed. 1887) p. 182.) Pozdneyeff in attempting to elucidate Unkovsky's historical account goes utterly astray, owing to the simple fact that he failed to identify Unkovsky's "Setsen Khan" with Ochirtu (or Uchirtu) the son of Bai-bagas, the Khoshote, and assumed, instead, that he was a son of Batur (Bogatir).

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(Great Kebin). Renat 1 has both names and rivers, which latter, united, are brought to lake Issik-kul ; but he fails to connect them, or the lake, with the river Chu, which is made to rise from the flat ground a few versts away from the western extremity of the lake.¹ R. omits the river Oingál (Ulakhól of 40-v. map) but has the name. B. has neither name nor river. B. omits the name Gurban (= 3) Chapchak, on the Upper Tes ; the river Baga Kemin (Little Kebin), though it has the name ; the name Gulsan Tollogoi, N. of Issik-kul ; the name Kharkira, source of the Charin ; the word "bolu" after Bolod, a mountain west of the southern extremity of Balkash. Renat 1 has one river flowing north towards the Irtish but failing to reach it. There are, in fact, several such streams. R. follows Renat 1, but B. makes the river flow into the Irtish, thus losing a valuable geographical indication of the nature of the soil. "Barchan" I deal with in my Table of Names, No. 223. Both R. and B. treat this, correctly, as a mountain. R. and B. both omit the river (? Tasti) flowing into Ala-Kul from the east, south of the Emil ; and both give only one source instead of two for the Ding gol, which reaches Ebi-nor from the south. B. omits the river Almattu near Kulja. All the above omissions are as compared with Renat 1. Again, on Renat 1 the lake Boroga-bosun is quite effaced by the Kalmuk name. On R. it is drawn uncertainly and might be a mountain. B. has it quite distinctly a lake, which again suggests that Renat had knowledge, independently of the Kalmuk map.

Ethnographical
names added by
Renat.

Mr. Bordzinkévich, to whom I owe Columns III. and IV. of the Table as well as Column I., omits the ethnographical names on the Swedish versions R. and B. as they are not on the original Kalmuk map, which was all I engaged him to transcribe. They are, however, of very great interest. For instance the "Kossiauter," for whom Maksheyeff can only put "?", are undoubtedly the Khoshotes, the Kalmuk masters of Tibet, as Filisoff knew.² Then, the "Kesmirer" must be the Kashmiris, and may not their eastern neighbours, the mysterious "Garriker," be the Gurkhas?³ The "Kottoner" are explained by Maksheyeff as "dwellers in E. Turkestan," and rightly ; but they are, more especially, the town-dwellers and non-nomads generally, *i.e.* the Sarts or Chantos. "Brüther = Buruts ; "Kirgisier" = Kirghiz ; "Isbecker" = Uzbeqs ; "Badakschaner" = inhabitants of Badakshan ; "Tanguter" = Tibetans ; "Kirgis Kasak" = the Kazak horde ; "Mongaler," "Songar," "Kalmucki" are all self-evident. The Siarakolzer are the dwellers on the river Sarikol.⁴ "Kuchi," according to Maksheyeff, = Kukki, the district of Kukhe (Koko or Kuku)-nor ; but this is certainly wrong. It can only stand for the Central Gobi.

I shall have more to say of these ethnographical names when speaking of Filisoff's map presently.

To facilitate comparison I have orientated my key-maps to Renat 1 and Renat 2 north to top instead of the reverse way, as in the originals.⁵ I have done this somewhat reluctantly as it involves looking at the facsimiles upside down—in so far at least as regards the names and numbers upon them ; but it is only the Kalmuk scholar who will be inconvenienced, and he, in this country at all events, appears to be a *rarissima avis*. I tried, in vain, to find a solitary specimen before I was lucky enough to come across Mr. Bordzinkévich, on a chance visit from Russia.

¹ For interesting information on the curious problem of the connection of Issik-kul and the river Chu see Supplementary Note, p. cxciv.

² See p. clxxxi. Renat, too, knew it ; see p. clxxviii.

³ In 1792 a punitive expedition was sent by Kien-lung against the rebellious "Gorkha tribe," in southern Tibet. Uspensky, *Kuke-nor*, etc., *Zap. I.R.G.S. (Ethn.)* vi., 1880, p. 82.

⁴ See p. clxxxi, note 8, and Supplementary Note, p. cciv.

⁵ Bretschneider did the same with his Chinese map of *c.* A.D. 1331. See *M.R.* ii. p. 18. But his belief that Chinese maps, before the Jesuits, were invariably orientated south at top was wrong. The "Two Oldest Specimens of Chinese Cartography," reproduced by M. Ed. Chavannes in *Bulletin de l'Extrême Orient*, Paris, vol. iii., 1903, have north at top. Their date is A.D. 1137.

THE RENAT MAPS

I will only add before proceeding to an examination of Renat 2 that in general appearance it is difficult to find a prototype for Renat 1. The rivers, indeed, have a considerable resemblance to those on the Chinese maps; they recall, still more, the rivers of Godunoff and Remezoff; but the mountains, the other great natural feature, are about as unlike the mountains of the Chinese maps as possible, nor do they in any way resemble those of the Russo-Siberian maps, the vital difference, in both cases, being that *they are seen in plan not in elevation*. The lakes in Renat 1 differ less from the Chinese forms, but on the whole they show more attention to correctness of outline, as a glance at the modern map will show. The shapes of Balkash-nor and Issik-kul are remarkably true.

To make matters yet more clear I give a reproduction, with key in English, of Unkovsky's map, which was drawn for him by the topographer attached to his mission, Gregory Putiloff, in 1724. In this the comparative correctness of the route taken and of all that came within personal knowledge of the members of the embassy is in striking contrast with the gross ignorance shown, for example, in the location of Balkash-nor, which, indeed, is broken up into three widely separated lakes.

Unkovsky's map
of 1724.

RENAT 2.

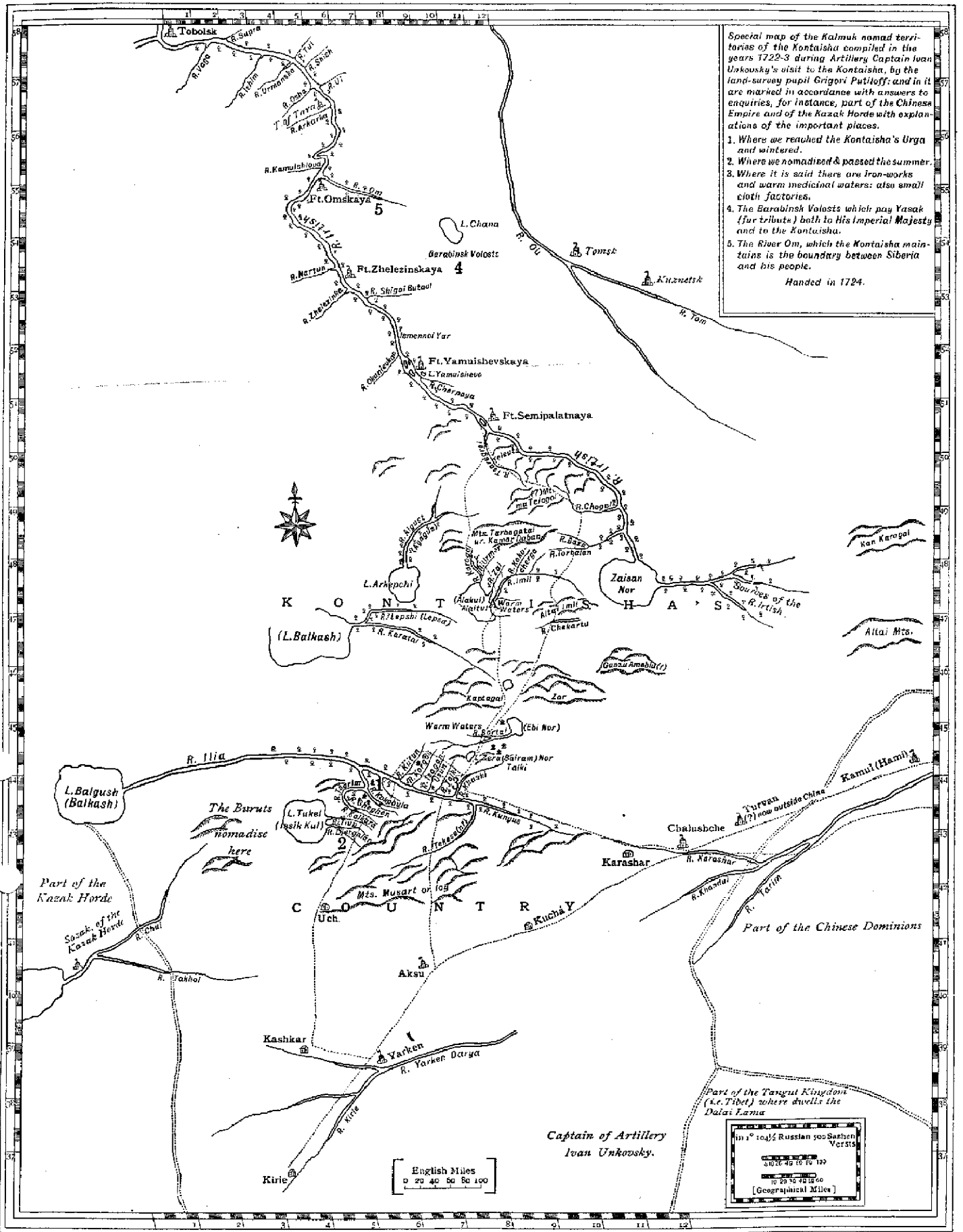
The second, so-called, Renat map differs essentially from the first. Renat himself tells us that it is a Kalmuk copy of a Chinese original taken from the Chinese when they attacked the Kalmuks near Barkul or Turfan,¹ and a glance at the map confirms, at once, the correctness of its attribution to China, though Kalmuk influence is also apparent.

We have seen that the Jesuits under Kang-hi mapped the Empire as far west, at least, as Hami. The question arises—what connection, if any, is there between these Jesuit surveys, direct and indirect, and Renat 2? Without attempting to dogmatise I think it will be evident from the following comparison that while the Fathers had at their disposal a large part of the information on Renat 2, not very much of it was due to their own travels and surveys. They surveyed the Wall as far west as Su-chow; and, according to Du Halde, three of them reached "the Hami district." But the d'Anville and Kang-hi maps prove that they knew nothing, even from native sources, of Tsaidam or the route to Gas-nor; while, though they give the stations on the route from Khara-nor

Renat = not a
Jesuit map.

¹ Hami was taken by Galdan in 1679. Before his defeat and death the *tarkhan*, Abdulla Bek, in 1696, submitted to China (Potanin i. 165, St. Petersburg, 1881). In 1713 Tsevan Araptan's great general, Tseren Donduk, took and destroyed Hami after defeating the Chinese in a night attack near Turfan. In 1716 the Chinese, numbering, it is said, 100,000 men, retook Hami and restored the town, also taking Turfan, fortifying it and building other forts at convenient places. In 1717 they reached the Kharashar river, but were repulsed by the Kalmuks from Chalish, which Unkovsky, from whom we derive this information (*op. cit.* p. 192), makes a quite different town from Kharashar; see his map. He gives Hami as in Chinese possession, but contradicts himself as to Turfan, which on his map and on p. 191 of his book appears to belong to the Kontaisha, Hami being the frontier town; whereas on p. 192 we read "that town, Turfan, the Chinese took and fortified, and to this day it remains in possession of the Chinese Khan." When, precisely, the Chinese original of the map Renat 2 fell into the hands of the Kontaisha is uncertain, but it must have been between 1713 and 1733—and probably not later than 1717. The differentiation between Kharashar and Chalish is of interest in view of the wide divergence of opinion on the subject. Yule writes (*Cathay*, 575 n. 2): "Ritter in one place suggests that Cialis of Goës may be Karashahr, but in another he will have it to be Yulduz, a place lying amongst the mountains of the Tian-Shan, celebrated for its beauty, its springs, meadows, and fine breezes, which was the encamping ground of Timur after his campaign of extermination against the Jats. Ritter had also previously identified Yulduz with the 'Cailac' of Rubruquis."

Yule controverts both identifications—of Yulduz with Cialis and with Cailac—he says "the real position of Cialis must be either identical with Karashahr, as d'Anville thought, or close to it." Timkovsky (*Travels*, p. 388) has "Kharashar, in Mongol Kharashara, distant 870 *li* from Tourpan, is inhabited by Turkestans and Kalmuck Torgouts, and is of great extent. The chain of mountains called Djouldouz, or Youldouz, the extent of which is about 1000 *li*, abounds in good water and excellent pasturage, and though infested with wild beasts is very well suited to the nomadic life. . . . The Sungarians at the time of their power pastured their flocks in these parts."



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(N.W. of Sha-chow), all the way to Lob-nor, they trace the route throughout in a north-westerly direction, with Lob-nor bisected by $42^{\circ} 20'$ North latitude instead of by 40° ! On Renat 2, on the other hand, this route with its stations, as far west as the limits of the map will allow (*c.* 60° E. of Pulkova), runs nearly due west (should be *c.* W.S.W.), and is separated, as it should be, by vast deserts from the route from Hami to Turfan ; and by desert and mountain ranges from the more southerly route to Gas-nor.

In general, the northern half of Renat 2, north, that is, of lat. 45° and west of the Selengá and its confluents, has little in common with the Jesuit maps ; while, west of Ubsa-nor and Ike Aral-nor, d'Anville and his informants lose themselves completely. They make the Irtish from its sources run, in general, due north ; while the Ouron ou (Bulagan), from its sources in the mountains to Lake Kizil-bash (Uliungur-nor), is confined within one degree of longitude—with the result that whereas Zaisan-nor (Honhoton omo, they call it¹) is more or less correctly placed on *c.* $48^{\circ} 30'$, N. latitude, Kizil-bash is on 46° instead of on *c.* $47^{\circ} 15'$!² It is quite evident that not only the Jesuits but the Chinese themselves, at this time, had little or no knowledge of North-western Mongolia or of Sungaria in general—little or no knowledge, at least, in a form available for maps.

In any case the map Renat 2, apart from what originality it may possess, is of interest as a contemporary Kalmuk version—with, probably, considerable improvements in the western half—of what the Chinese had with them on their frontier campaign against the Kalmuks at a critical time in the great struggle between them ; and, in spite of all defects, the amount and correctness of the information it gives, compared to anything else that we have of that time and country, is astonishing.

Renat 2 is more Chinese in method than Renat 1, as is only natural. The mountains are seen in profile—reverse ways on the top and bottom halves of the map—but still they are very different from the conventional scratches that represent mountains on the Kien-lung and Kang-hi maps. There seems to be a *cachet* about them as of something exotic to China, and this something can only be due to the Kalmuk copyist.

Uppsala University Library owns not only this Kalmuk version of the missing Chinese original but a key to the former by Renat, on which he succeeded in transcribing, in Swedish, all the names on the northern half of the map. His eyesight then gave way and the work was never completed. Now, for the first time, I reproduce the map in an admirable facsimile, and, as in the case of Renat No. 1, I give (*a*) Mr. Bordzinkévich's Russian transcription of the 536 names inscribed in Kalmuk upon it, with his identification of many of them, chiefly from Klapproth's map of 1836 ; (*b*) my own, English, transcription from his Russian ; and (*c*) many further identifications—my own—from d'Anville's Atlas, from Klapproth, and from modern maps. Also a key-map.

Key-map to Renat 2.

I have further collected from various sources what information is extant regarding Renat, Filisoff, and others, correcting mistakes made by various writers in regard to them.

I am aware that even now the subject is by no means exhausted. To deal quite competently with these maps one should be not merely an expert in Central Asian geography and history, but a pundit in the Chinese, Mongol, and Kalmuk characters and scripts. Moreover, some knowledge of old Swedish and a mastery of seventeenth-century Russian are not less requisite. To such extensive knowledge I make no sort of pretension. I only claim that students will find here more information as to these maps by far than has ever been brought together before, and in a shape to render further investigations comparatively easy.

¹ Zaisan-nor is also called in Kalmuk *Koung-hoton nor*, *lac des cloches*, "parce que ses vagues se brisent avec fracas contre ses bords, ce qui occasionne un bruit continu qui ressemble de loin au son des cloches" (Klapproth, *Magasin Asiatique*, i. 179).

² Uliungur L. and Kizil Bashi Nor occur as sheets of water of different sizes and dimensions, separated by a mountain chain, on the large map in *The Coming Struggle in Eastern Asia*, B. L. Putnam Weale, published in 1909 !

THE RENAT MAPS

Of Renat's life nearly all that we know, probably all that ever can be known, is to be found in the following pages. It is meagre enough; yet the framework is such as to rouse imagination. A "Carolinian"—magical name!—this "cannonier" or artilleryman shared in the glory of the "royal madman's" fatal adventure, the memory of which Sweden cherishes with deathless pride and devotion though it ended, at Poltava, in a defeat and disaster from which she has never recovered. Charles XII. himself escaped with life, but of his army thousands fell, thousands more were taken captive. Of these, the officers, including Renat, were sent to Siberia, where they left an honourable and ineffaceable mark on the land of their exile and on its people. Strindberg has given a glowing, but in some respects exaggerated and erroneous, account of what they accomplished. To this Dr. Sven Hedin supplied the corrective in his *Svar på "Tal,"* already referred to, wherein he speaks at some length of Renat, who, with others of his countrymen, had the further misfortune to be captured by the Kalmuks, though whether or not their physical sufferings were enhanced thereby is not so certain.

Renat's life.

The Kontaisha—Tsevan Araftan, an enlightened ruler—valued greatly such of his prisoners as were able and willing to help him in any way to strengthen his power and further his people's progress. He and his Kalmuks were nomads, but his sway extended, by then, over great numbers of Bukharans and others, dwellers in towns or settled agriculturists. He set some of his Swedish and Russian prisoners to establishing factories for the production of velvet, cloth, and paper, others—women—to the production of gold and other braids, and to the teaching of his daughters such-like woman's work. But Renat, the gunner, was of all others, probably, the one most to his mind. In the struggle against the might of China (*i.e.* the now firmly established Manchu power), to say nothing of his warfare with the Kirghiz and, intermittently, with the Russians, he felt the want of artillery, and he set Renat to work upon guns and mortars, with what result we shall see. His Swedish captive served him, and his successor, faithfully and well during seventeen years, and, at last, in 1733, he was set free—not without tangible proofs of Galdan Tseren's gratitude, as we may judge by the articles Renat afterwards presented to Uppsala University, though the legends of his vast wealth and of his leadership of the Kalmuk forces in the field may be dismissed as purely fantastic. We know from Renat himself that, at his request, the Kontaisha, at parting, made him a present of the two maps since known by his name—a not ungenerous proceeding for which we, too, may keep in grateful memory Galdan Tseren.

The following letter and statement (numbered I. and II. respectively), preserved in the Royal University Library at Uppsala, are of very great interest. I translate them from copies of the originals sent me most kindly by Dr. Aksel Andersson, the Librarian.

I. FROM: THE *Uppsala University Library's Collection of MSS.*, G : 190. J. G. RENAT TO ANDREAS NORRELIUS, LIBRARIAN OF THE UNIVERSITY,¹ 25/4, 1743.

"Much honoured Sir,

"That a gift of so little value has been graciously accepted by the Royal Library and you, Sir, I am for ever obliged, since I did not expect an attention so great and so little deserved. If I could by way of gratitude be of service to you in any knowledge I may possess in these matters it would give me great pleasure. As to that book, or *Tabula Sinum* [*sic*], it was printed in China and captured in a battle between the Kalmuks and the Chinese. The one writing is Tangutan² of which the characters are almost like

¹ The letter was formerly supposed to have been addressed to G. Benzelstierna. I am indebted for this correction as well as for many others and for all information in the notes to this letter and statement, except where otherwise specified, to Dr. Aksel Andersson.

² Tibetan.

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the Hebrew. But it is written from left to right. The other writing is Manchu, and is written almost as Mongolian, but they can neither well read nor understand one another, nevertheless it is written in the same way from left to right, the lines from above downwards. These Manchus are the people who took possession of China, their king is of the Manchu race, yet in their own language all Kalmuk writing is called by themselves Mongul Kellendú or Mongol writing.¹ To the Kalmuks belong the following peoples, who once dwelt together, but afterwards owing to discord separated and then called themselves Dürben örret [Durben Oirat], viz. Causchauter [Khoshotes], Torguter [Torguts], Mongaler [Mongols], Bargo Brat [Bargo-Buriats], Barabu Tellenguter [Barabinsk Telenguts], Chirgis [Kirghiz], Songar [Sungars], Chüt [? Chut-Telenguts]; but are now some of them under the Chinese—whom the Kalmuks call Sürschit—and are one part Cosauterna [the Khoshotes] who dwell partly in Tibet, together with the Tanguts [Tibetans], partly with the Songars, and partly together with the Torguts who likewise are all Mongols under the Chinese. In my time, however, 10,000 households of them went over from their own people to the Songars. A part of the above-named are, so to say, under Russian protection, such as the Torguts who dwell near Astrakhan, the Bargo Bratzi² in Siberia, over against Selenghinsk, the Barabintsi between Siberia and the Sungars, who pay tribute to Russia as well as to the Sungars. Together with, or under, the Sungars are Chüt-Telenguts, and Kirghiz, and a kind of people who came from those and are called Oranchaier [Urianhais]. I have been [a prisoner] under these³ Sungars and [? I] obtained the largest map [*i.e.* Renat 2] from the Chinese when they attacked the Kalmuks at Barcöll [Barkul] or Turphan [Turfán] which town is marked on some maps and lies on their boundary. I have copied this half of it [the map] with Roman letters and thought to translate the other half in the same manner; but the minute writing, together with my dim eyes have hindered me. I believe, however, that it has probably been copied in Russia, for, five years ago, I lent it to Professor de Liell [de Lisle] at the Academy of St. Petersburg, who sent it back to me with the promise that I should also receive a Print, but up to now it has not arrived. It is copied by a Kalmuk from the Chinese original and the later⁴ [map] was given [to me] at my request at my departure by the Sungar ruler as well as the later one which he also himself made of his country,⁵ and although I could put in many names of mountains and rivers therein marked I have preferred, notwithstanding, to leave it as I myself received it from the Ruler, for I have found on other maps names both of places and rivers which in my seventeen years residence there I never saw or heard of.⁶ You must forgive me, Sir, that I have delayed my information so long, for I almost believe that it was probably already known to you; still if there is anything

Provenance of the map Renat 2,

and of Renat 1.

¹ Lit. "writing of the Mongols," if we take Mongalis as a genitive of a plural form Mongali. I follow Dr. Andersson in taking it for a miswriting of Mongalisk.

² The word is not clearly legible; it may be Bratii or Bratizi.

³ Lit. "their" (*dess*) but no doubt a miswriting for *desse*.

⁴ ? Latter.

⁵ Dr. Dahlgren (Librarian of the Royal Library, Stockholm, perhaps the greatest living authority on ancient geography) informed me that in a little MS. volume in the Royal Library in Stockholm, entitled *Några smd annotationer gjorde vid en kort conference emellan Lieut. Renat som ifrån Calmukiet återkommit och Bisop Hög. Hr. Dr. Eric Benzelius 1763*, it is said, "Contaigen giordt chartan sjelf." But the words stand there only as a heading without any explanation. "Perhaps," writes Dr. Dahlgren, "they are to be interpreted as an enquiry from the side of the Bishop to which Renat has given no answer." However, we have Renat's statement to the same effect.

Bishop Eric writes March 1735 to his brother Gustaf Benzelierna, "Be good enough, my dear brother, to remind Lieut. Renat of his *Charta Geographica Calmachorum* which he promised to copy for me . . . all the conversation we had with him here in Linköping I have written down (Engelström Collection in the Royal Library, Stockholm). Without questioning you will get nothing from him [Renat] as he is a quite uneducated man."

⁶ Dr. Andersson writes: "It is uncertain whether he means the 'places and rivers' or the 'names' as never seen or heard of. I am inclined to read 'names.' Perhaps he means that he never saw the places, etc., or heard of the names. *Non liquet.*"

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else that I could inform you upon I shall always be willing, yet asking you to forgive my bad writing ; meantime I recommend my step-son Isaac Fritz to your good graces, and with an earnest greeting from my wife, I remain much respected Sir, your most obedient servant,

“JOHAN GUSTAFW [*sic*] RENAT.”

“STOCKHOLM, 25th April, 1743.”

Collated by Dr. A. B. Carlsson.¹

II. FROM : *Acta Bibliothecae Upsalensis*, 1727-1756. UPPSALA UNIVERSITY
LIBRARY ARCHIVES A : 8.

“On the 13th April [1743] Captain Johan Gustaf Renat who had lived seventeen years with the Kalmuks presented to this Royal Library :

1. *Tabulas sinuum secantium et tangentium* printed most beautifully in China on cotton paper, and taken in a battle between the Chinese and the Kalmuks.
2. A geographical map of “Songarska Kalmuchiet” on cotton paper, a little more than $1\frac{1}{2}$ ell long and $1\frac{1}{4}$ ell broad with the names of places on it, written with Songar characters. [Actual dimensions in centimetres, 105.5×83.5 .] The map Renat 1.
3. Another [geographical map] on paper, but a copy of the before-mentioned, on which the names of places are set out in Roman writing. Renat's Swedish version of same (R.).
4. A geographical map 1 ell and $1\frac{1}{4}$ foot long and the same breadth. As to this [map] the above-named Captain writes thus in a letter to me [Andreas Norrelius, Librarian—here an extract from Renat's letter of 25th April]. This map is on cotton paper like No. 2. [Actual dimensions in centimetres, $c. 111 \times 100$.] The map Renat 2.

“This gift of Captain Renat's must be esteemed as amongst the rarest things the Library possesses, and it will therefore be placed in the oak-chest wherein the *Codex Argenteus* is preserved.

“He gave me the map of which he makes mention in the above-mentioned letter of April 25th, saying that on account of his dim eyes he could not complete it, together with much else, as specified on p. 207, to hand over to the Library.”

Collated by Dr. A. B. Carlsson.

The specification on p. 207 is as follows :

“1743 [June]

“The 25th and 28th I [*i.e.* Andreas Norrelius] called upon Captain Renat in Stockholm and persuaded him to present to the Library :

1. A red tunic with sleeves adorned all over with gold inwoven. It fastens with a silver button.
2. A wide coat without sleeves to wear outside the above, made of the same kind of stuff, with a silver-plated red velvet dagger-sheath with two daggers in it, one larger and one smaller with green handles. From this hangs a wide and broad pocket of green gold-flowered stuff, in which is a vessel of Tartzai [?] and used as a spoon and cup. In it is a white cloth, to clean it with after eating. This pocket and sheath hang together from a well-gilded loop which sits in a hinge in an oval of the same size and metal, with beautiful work round it and with a crystal or piece of glass in the centre of it. On the other side hang in a similar oval, a purse and “armklåde” [a Swedish word now obsolete—cloth to wear on the arm, handkerchief—in olden times worn on the arm].
3. Two leather bottles with necks, in which wine is kept on a journey.
4. Two pretty [attractive] cups, the one made of pig-skin, the other of birch-bark.

¹ The punctuation in this letter, what little there is of it, is very faulty. At Dr. Andersson's suggestion I have ventured to correct or supplement it sufficiently to make the meaning clear.

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5. A stone out of which the Kalmuks are wont to make themselves teacups and it is called . . . " [this is unfinished].

Collated by Dr. A. B. Carlsson. Of these articles only the Maps are now known.

FILISOFF'S MAP.

I now come to this missing document which we know of only from the following extract from the Report of Major Ugriumoff, printed in Unkovsky's *Embassy*, etc.¹

"In the written statement of Major Ugriumoff, who had been with the Zengar [Sungar] ruler in 1732, it is written :

"The Swede, Cannonier Renat, who had been a prisoner with the Zengortsi [Sungars] told him in the course of conversation that he had there manufactured the following cannon :

4-pounders	15
and small ones	5
and 10-pounder mortars	20"

[In the report of Podzoroff's mission to the Kalmuks in 1748, *Viestnik*, I.R.G.S., 1851, Pt. iii. No. 6, p. 63, a Russian deserter, Ivan Mikhailoff, states that he has started a brass-foundry on the river Timerlek and cast 3 cannons, with carriage and wheels complete.

In Tersky's report (*ibid.* p. 69) we hear of a Russian who, on occasion of the accession of Adjan Khan (*i.e.* Lama Dordji) fired off 2 cannons. The Kalmuks present fell to the ground, as the Ostiaks did on the Ob in 1595, but the Khan, evidently, was greatly pleased. The ball was the size of one's fist. A little farther on we find :

(p. 70) "It is said they make cannon at the Urga more than 1 sazh. long."

"Concerning the condition [*i.e.* the geographical position and resources] of the Kontaisha, so far as he, Ugriumoff, could ascertain, there is an exact copy herewith taken from the description he handed in regarding it."

COPY.

"Map of the Zungor possessions and all that journey beginning from the chief town of Siberia, Tobolsk, up the river Irtish and across the Steppe and some of their Kalmuk nomad districts, made during the residence with the Zungor ruler of the nomad Kalmuks, Galdan Cheren, of platz-major Ugrimoff [*sic*] envoy from the Court of her Imperial Majesty, in the years 1732 and 1733. (Whilst the envoy was there Galdan nomadised, towards the end of April, from the *uróchishché* Kochighir down the course of the river Ili; and in the last days of May, June, July, and August from the *uróchishché* Mt. Tumurluk, along various rivers—the Gheghen, the Kharakir and the Tekes—to the *uróchishché* Tsaptsal; and in September, and the whole winter through, to the end of March, along the river Ili; first, down-stream; then, however, up-stream, to where he is accustomed to linger on till May, at the *uróchishché* Kochighir; and in May he goes to the *uróchishché* Mt. Tumurluk, and thus his round is accomplished, as we ourselves witnessed.)²

¹ *Posolstvo k ziumgarskamu khun-taiji Tsevan Rabtanu Kapitana ot artillerii Ivana Unkovskovo i putievoi journal yevro za 1722-1724 godi*, St. Petersburg, 1887, p. 233, Appendix VIII. Ugriumoff in this book is written Ugrimoff. Major Ugriumoff was sent to Galdan Tseren Khan in 1732 with a demand for the return of the 15,000 *Kibitkas* who had fled from the Volga in 1701 with Ayuka's son Sanjep. Probably Renat (p. clxxviii) refers to the same people, though he mentions 10,000 only.

² Of these seven names we have on the Kalmuk map "Ili" No. 136, "Tumurluk" No. 114, r. "Gheghen" No. 73, r. "Kharakir" No. 74, r. "Tekes" No. 90, Mt. "Tsaptsal" No. 100. The only one missing is "Kochighir," which is marked on all modern maps either as a fort or small town some 10 to 15 versts south of the Ili, and about midway between the mouths of the Korgos and the Talki. Unkovsky wintered with the Kontaisha lower down the Ili, also on the south side of that river. See statement at head of his map (No. 18).

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“ 1. Near the mountains called Kamen Muzaet¹ (across which the road to the Khoton towns is very difficult, on account of ice) on the south side, is a fortified place Aksu, not large, they say, in itself, nor populous; nor does it increase in wealth or inhabitants; but dwindles, rather, on account of the burdens laid upon it by those sent there to collect tribute. Text of Filisoff's map.

“ This is paid to the Zungors in native copper which the inhabitants find in the earth, near by them, of this fort;² and also, to some extent, in zenden (the zenden is a fabric like canvas dyed in colours, some blue, some yellow, some green, used by the common people for clothing).³

“ 2. The fortified place Kutsa, from which now hardly anything is taken, as it is mostly ruined; formerly, according to report, it did pay somewhat, but now only a trifling amount in native copper. Here likewise, they say, *sal ammoniac* is found.

“ 3. The fortified place Ush, according to report, was recently almost deserted; but is now inhabited by people brought from Turfan.⁴

“ 4. The town Erken [Yarkand] has, they say (if truly), up to 10,000 inhabitants, and is the best in the Khoton country.

“ 5. The town Gashgar [Kashgar] which they say is as populous as Erken.

“ 6. The town Khotoni Khoton [Khotan] truly not very populous; smaller too than Gashgar. Here is found the stone yashma [jade], which is sent to India for sale and as presents.

“ These three towns—Erken, Gashgar, and Khotoni Khoton—pay their tribute to the Zungar ruler, in gold, and also in khams and basmas, and, to some extent, in zenden. Khams and basmas are like zenden, but khams are sometimes of better, basmas of worse quality than zenden. Khams are used similarly, but *vuiboiki* [printed cottons] that is basmas, save as bedding for middle-class people, I did not happen to see in use.

“ 7. The town Kerea, likewise not populous. Here in the river they find yellow sand-gold.⁵

“ All these four towns—Erken, Gashgar, Khotoni-Khoton, and Kerea—pay the Zungar ruler, together, 700 *lans* of gold, that is 63 *funts*,⁶ $67\frac{2}{11}$ parts of a *zolotnik*. Kerea pays nothing more as tribute, in other products, but only its share of the 700 *lans*.

“ From Kerea to the South, beyond the mountains, the Tanguts [Tibetans] who are subjects of the Khosheyuts, obtain sand-gold from the mountains. Those same Khosheyuts are under the protection of the Chinese.⁷

“ There are seven towns and fortified places in all. In religion they are Muhammedans, made subject to the Zungar kingdom by the Bash Tukhan [*sic*, should be Bashtu Khan, *i.e.* Galdan].

“ The town Sharagol [Sarakol, Sarikol] and the people of the same name, Muhammedans in religion, subject to the Zungors; but what tribute they pay, if any, and by whom conquered, or whether they became subject voluntarily is not known.⁸

¹ Evidently a misprint for “Muzart.”

² The copper mines “which have been systematically worked” are at Onbash on the Muzart river. *From Kulja across the Tian Shan to Lobnor*, by Prjevalsky. Introductory remarks by Sir T. Douglas Forsyth. London, 1879.

³ Pegolotti mentions Zendadi which Yule renders *gauzes*. Etymologically there may be some connection.

⁴ See *ante*, p. clxvii.

⁵ “One day’s journey from Keria gold is obtained in the mountains” (Prjevalsky, *op. cit.* p. 76).

⁶ The Russian funt is one-ninth part less than the English pound (avoirdupois). The pood contains 40 funts or 36 lbs.

⁷ They went over, gradually, to the Chinese owing to Galdan’s murder of Ochirtu in 1675. See Potanin’s *Mongolia*, 1883, Part iii. p. 331.

⁸ This very interesting statement as to the “Siarakolzers” of Renat and their religion may be illustrated by the following, from one of the most recent travellers in that region (p. 82). “They were Sarikolis, Shiite Mussulmans, whose tribe came originally from Wakan; all were of a pronounced Hebrew type and disgustingly filthy.” The author tells us (p. 111 note) that the Sarikolis came to settle

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“Of the town of Badakshan, they say it is not known to whom it owes allegiance ; it is not under any one’s protection. Here, they report, there is a cavern in the mountains into which once a year they send a few people with lights to obtain precious stones, and they find, indeed, *lals*¹ and some others [Lat.] 39, 48.

“The town Tashken, they say, is three times bigger, and does not now belong to the Zungars ; it is either independent or belongs to the Kazak horde. But it did once belong to the Kontaisha² [Lat.] 42.

“The mountains Mustak are already beyond the territories of the Zungars. Of these it is said thus, that the people dwelling near that mountain, blindfolding passers-by who would go over that mountain, carry them over it on their backs, these weight carriers being called Keshmeri [Kashmiris], of the Muhammedan faith. They are under Indian protection [Lat.] 39, 10.

“The people Tubet, idolaters in religion, wear caps without tassels. Religion almost the same as the Kalmuk. Under Indian protection.

“Lobnor has numerous islands, as many say ; and in those islands dwell people of the Muhammedan religion.³ Hardly under any one’s protection. [Both] Kalmuks and Chinese claim them as their own, but they pay little attention to either ; since neither of these peoples is very active on the water, so cannot manage to reach them on the islands, however much they may try [Lat.] 41, 30.

“Of the frontier between the Zungars and the Chinese.

“It is stated, truly, by those who have heard it, that the Kalmuks suppose their boundary with the Chinese to be as follows : The Altai Mountains on their side, and the mountains Ungandaga also on their side or, possibly, half-and-half ; and straight to Barkul. And Lobnor with its inhabitants likewise on their side, and straight to the mountains, to the Tanguts.

“But the Chinese claim those mountains, and Lobnor, and the mountain Bogda (that is, should the dispute with the Kalmuks be settled peacefully) ; but if it comes to a quarrel then (say the Chinese) the river Ili with all its territories and the Kalmuks themselves are ours [Lat.] 42, 50.

“And at present Kalmuks dwell in the Aktar [? Ektag] mountains on the right side of the river Irtish.

“As regards Russia the Kalmuks formerly claimed the river Irtish as the frontier, falling from the East into the river Om (where now stands the Omsk fortress).⁴ According to them its name is Kara Om, that is Chernaya [Black] Om ; it is situated under [Lat.] 54, 50. [It will be noticed that these latitudes are all wrong.]

in these wild gorges about forty years ago [?], and that Tash Kourgan, a Chinese fortress on the river Sarikol, contains 700 to 800 inhabitants. “Its importance is due especially to its strategic position as the meeting-place of numerous roads leading from the Pamirs and from India. There the Chinese have a sort of legate as administrator and overseer of the region, the Russians a dozen cossacks, and the English a native Vice-consul, an officer of the Indian army. All these, it seems, live on good terms, although the interests of each are often conflicting.” His map shows the Sarikol as a stream west and north of the Raskem daria, with which it unites at *c.* long. 74° E. lat. a little south of 38° to form the Yarkand-daria.—*Around Afghanistan*, by Major de Bouillane de Lacoste (trans.). London, 1909. See also Stein’s *Ruins of Desert Cathay*, vol. i. chap. ix., for an extremely interesting account of present-day Sarikol (district). But see Supplementary Note on p. cciv.

¹ Balas rubies ; see Vol. II. p. 431, Note E.

² Unkovsky (p. 102) ten years earlier says : “Last year [*i.e.* 1722] Tsevan Rabtan sent his son Shuno Daba against the Kazaks, and he defeated them, taking 1000 families prisoners, and conquered the cities of Tashkent, Sairam, and Kharamurut.” These last two towns are about 15 and 30 kilometres due E. of Chimkent, respectively.

³ See Renat 1. Prjevalsky tells us that the people of Lobnor inhabit eleven villages mostly situated “in the midst of the lake, and that the Mahommedan religion although professed by all has not taken deep root among them” ; they are very wretched, but “water is their native element.” *Op. cit.* pp. 104, 111, and 113.

⁴ It is, of course, the Om that falls from the east into the Irtish.

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“‘ And now they again claim [as limit ?] the great river Ob falling in under the same degree.¹ Another [river] they likewise call the Kara Om, but in Russian it is called Uen ; that is the river Inya, of which the upper water is called Uen, in the Tomsk district ; and [they claim?] the town Kusnetsk above it with all its district. It is to be expected, moreover, that before long the Zungars will claim [still] farther East, on pretence of finding out some boundary marks or rivers, since in conversations, though without foundation, they have begun to say that the town and whole district of Krasnoyarsk is on their land.

“‘ Such description of the work was made by the surveyor Yakoff Filisoff and given in by him to the college, together with the map, on 2nd June 1734.’ ”

It will be seen that in addition to the seven names already dealt with, of which all but one (Kochighir) are on Renat 1, we have in Filisoff's "Description," omitting the names north of the Irtysh, the following :

The towns Aksu, Kutsa, Ush, Erken, Gashgar, Khotoni Khoton, Kerea, Saragol, Badakshan, Tashken, Turfan and Barkul ; of peoples the Khosheyuts, quite correctly stated to be rulers of Tibet, though themselves under Chinese suzerainty, the Keshmirer and the Tanguts (Tibetans) ; the mountains Muzart, Mustak, Altai, Ungandaga, Aktai (? Ektag) and Mt. Bogda ; the rivers Ili, Irtysh and the lake Lob-nor. Now with the exception of "Ungandaga" [? Ulan Daban] a doubtful spelling, probably a corruption, every single name on the above list is to be found on Renat's Swedish version and all but the three names of peoples, "Khosheyuts," "Keshmirer," and "Tanguts," on the Kalmuk original, which does not give any race names. When it is seen, further, that Filisoff and Renat both mention gold in connection with Kerea and that both mention the people of Kashmir—in the circumstances a noticeable fact—and that Renat 1 has the islands in Lob-nor, spoken of by Filisoff, I think it will be admitted that there is good reason to conjecture a pretty close connection of some sort between Renat, the Swedish prisoner, and Filisoff, the Russian topographer, who was wandering about in the suite of the Sungar ruler during 1732 and 1733, the year of Renat's liberation, upon which occasion the latter obtained from the Kontaisha the maps since known by his name. It is, in fact, incredible that Renat should have been unaware of Ugriumoff's and Filisoff's presence at the Sungarian headquarters, and, considering his evident interest in maps, it is at least unlikely that he should have known nothing of Filisoff's work, or failed to help him in it. We may even conjecture that his liberation was directly due to Ugriumoff's representations and that he left Sungaria with him.²

I caused search to be made, but in vain, in the Moscow Archives for Filisoff's map. Mr. S. M. Bielokuroff suggests that it may yet be found in Petrograd. On the 5th April 1734, as he tells me, Ugriumoff reported to the College of Foreign Affairs as to rewarding Filisoff "for having made a map of Kalmuk places and adjoining countries with all diligence and clear description." If ever the map turns up I shall expect to find in it ample confirmation of the suggested connection with Renat 1, but nothing more. I shall *not* expect to find in it the original of that map.

As to Renat's capture, in the documents in Moscow scheduled "Sungar Affairs" it is written that Renat "who was taken prisoner in 1709 at Poltava and exiled to Siberia, set out for Yamuisheff in 1716 to visit Captain Kalandar [no doubt a compatriot] and near the said fortress was, together with many others, Russian subjects, captured by the Kalmuks and subsequently released by the Kontaisha." Renat captured by Kalmuks.

¹ A few versts south of Kolivan.

² Since writing the above I find in Podzoroff's report of his mission to the Kalmuks in 1748 (*Viestnik* I.R.G.S., 1851, Pt. iii. No. 6, p. 66):—"That Zaisan said: 'when, formerly, your envoy, Major Ugriumoff, was here *he took all your people back who were our prisoners* [my italics]; but you had more of our people than that, and that same Major Ugriumoff cheated us.'"

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Unkovsky¹ gives us the following information as to this raid :

“ Taken prisoners on the way before reaching Yamuisheff—

Officers and officials of all sorts escorting the treasure	14
Soldiers	47
Dragoons	4
Smith	1
The Swedish pastor Magnus Albek [?], shtik-yunker Renot [<i>sic</i>]	2

and various others to a total of 314.

“ Altogether in the year 1716, by the sudden attack of the Kalmuks on Yamuisheff and on the road thither, the Russians lost 419 persons of all ranks and both sexes, taken prisoners, besides 133 killed or [? since] dead.”

Renat's wife.

Unkovsky tells us, further,² that of the captive Swedes “ some, names unknown, had established a small cloth factory. Of the Russian prisoners (taken at Koriakoff Yar, on their way to Yamuisheff) two had set up leather factories and at those factories dwells (it is said) Captain Vasili Bieghisheff. Christina, wife of Captain Sims (who was killed³), who married (being a prisoner of the Kontaisha's) lieutenant Yagan Debish, made gold and other braids and taught the Kontaisha's daughters and other girls. And now (it is said) she lives with her husband at Erkan [Yarkand] and, so they say, makes velvet.”

This marriage is not recorded in the biography of this much-wedded lady,⁴ wherein as widow of Captain Sims she marries Renat. Her christian name, too, is given as “ Brigitta ” ; but in the passport procured for the couple by Dittmer, the Swedish minister in St. Petersburg, in 1734, to enable them to return home at last, she is called “ Brigitta Christina.”⁵ In the *Personalier* it is stated that, thanks to the favour of the Khan's wife, she was able to do a good turn for “ Johan de Besche, late cornet in Schlippenbach's dragoons, and for Johan Renat, late sergeant of artillery, who had become a Russian lieutenant.”⁶ Evidently Yagan Debish is Johan de Besche, and either Unkovsky was misinformed, or the widow “ married ” first one then the other of her fellow-countrymen and fellow-captives. Now, it is expressly stated in the *Personalier* that during the seventeen years of her captivity with the Kalmuks she had been unable to hear the Word of God, or benefit by the Holy Sacraments. It seems certain, then, that marriage according to the rites of the Lutheran, or other Christian Church was impossible, and this is borne out by what follows as to her marriage to Renat in St. Petersburg. If, however, in the circumstances, such rite were dispensed with, who would blame the unhappy captives?

What became of pastor Albek is unknown. Renat evidently was Fru Brigitta's fourth or fifth husband, and one is glad to know that after so many trials she was “ dearly-loved ” to the end. Renat, after her death, consoled himself by marriage with “ the rich widow Fritz.”

Elsewhere Unkovsky reports⁷ that 200 Russian prisoners are, for the second year running, employed under command of a Swede, taken near Yamuisheff in 1716, in building a great number of doshchaniks (flat-bottomed boats) “ in which the Kontaisha intends to take flight down the Ili river (into the reed-beds, where that river loses its current, and the water goes into the ground amongst very great reed-beds) fearing the Russian and Chinese troops (for they are greatly afraid of the Russian soldiers, and therefore the Kontaisha has collected around him the Kirghiz and the Telenguts lest they desert him).”

¹ *Op. cit.* p. 230.

² *Ibidem*, p. 232.

³ While heroically defending the treasure of which he was in charge for Buchholz's expeditionary corps at Yamuisheff, sent by Peter to take possession of the gold-bearing districts beyond Yarkand!

⁴ *Personalier öfwer Lieutenantens af Kongl. Mai:tz artillerie Regemente Herr Johan Gustav Renats i Lifztiden Kier Elskelige Hus Fru och Maka, Fru Brigitta Schersensfeldt*, a MS. first made use of in Miss Sigrid Leijonhufvud's little book *Två Kvinnoöden från Karolinska tiden*, Stockholm, 1907, of which she kindly gave me a copy.

⁵ *Op. cit.* p. 99.

⁶ This is categorically denied by Dittmer, *op. cit.* p. 98.

⁷ Unkovsky, *op. cit.* p. 93.

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In G. Müller's *Sammlung*, iv. p. 276, there is another notice of Renat by a contemporary. Müller quotes Lars Salvius, the Swedish Editor of Joh Christ. Schnitscher's account of "Ayuka's Kalmuks"¹ as follows: "Especially must I celebrate the very great kindness of Captain Renat, in supplying me with certain notes which I have placed beneath the text. This gentleman's seventeen years' stay with the Kalmuks was of sufficient duration to furnish him with much information as to their condition, which we may hope fully to participate in when his detailed account is published." It would appear, then, that Renat contemplated publishing an account of the Kalmuks, and, possibly, of his own captivity amongst them. Or, it may be, Bishop Eric Benzelius hoped to extract the information from him and give it literary shape.

A piece of English evidence—likewise contemporary—supplies us with some additional facts and is not without a vivid human interest:² An Englishwo
evidence.

"I have been engaged some days in conversation with a Swedish lady who was taken prisoner by the Tartars, has lived eighteen years amongst them and is just now come back. Her history as I had it from herself is as follows: She was the wife of a Swedish captain, was taken prisoner with her husband by the Russians and was sent with him and several others to Siberia. On the road, being attacked by a party of Calmuck Tartars, the prisoners joined with their guards to prevent a second captivity. In the engagement her husband was killed and those that were left alive were taken; their conquerors divided their booty and separated the prisoners. She, and a Russian who spoke the Calmuck language, were carried off by two Tartars; one of them liked her so well as to make love to her, and made the Russian his interpreter; but when entreaty would not prevail he attempted force. She at last bit a piece of flesh off his bones; for which he would have beat her but was hindered by his companion. In a few days they arrived at the tent of their Kan or King, when the man rallied his companion on his adventure with his female captive. The Kan called for her and her Russian interpreter, and asked her why she refused the man her favours, and seemed to wonder at her delicacy of sentiments in having a choice of a lover; but told her, as it was the custom of her country, nobody should force or molest her, and gave her to one of his wives (for he had two). She asked her if she could work and the lady showed her a purse she had worked, with which she was wonderfully pleased, kept her to work at her needle, and treated her with great tenderness. They gave her meat of all sorts and were diverted to see her dress it, for they eat all their meat raw. Fortune brought a man of her own nation as prisoner to the same place; he taught these Tartars several useful arts, and at last he founded cannon, which, as they were at war with the Chinese, was so great a piece of service that they gave him his liberty, and, at his request, hers also; and they have been married here, and are preparing to go to Sweden."

This letter is dated 1735—erroneously; for Renat left St. Petersburg with his wife in June 1734.

In the Military Archives at Stockholm is preserved Renat's humble petition, dated 9th October 1739, to be dismissed the army honourably and with a pension. In this, or rather in the accompanying record of his military services, he declares that he made guns and mortars for the Kalmuks, organised their artillery, and taught 200 of them the use of

¹ *Berättelse om Ajuckiniska Calmuckiet eller om detta Folkets Ursprung, huru de Kommet under Ryssarnas Lydns, deras Guddär, Gudsdyrkan och Prester . . . deras Politique och Philosophie, etc., Stockholm, 1744. 8°.*

² *Letters from a lady who resided some years in Russia to her friend in England, with historical notes.* The second edition, London, Dodsley, 1777. To some copies of this edition were added, subsequently, eleven more letters of "the late Mrs. Vigor," and brief details of her life. She was the daughter of the Rev. Mr. Goodwin, a clergyman of large fortune in Yorkshire and married firstly, Th. Ward, Consul-General to Russia, 1728; secondly, Claudius Rondeau, Esq., Resident at that Court, November 23, 1731; thirdly, William Vigor, Esq. of Taplow, Bucks, whom she long survived. She died at Windsor, September 12, 1784.

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that arm, all out of love for his country—the implication being, of course, the reasonable one that the stronger the Kalmuks the worse for Russia, Sweden's secular enemy. He calls Count Dittmer to witness that whilst in St. Petersburg, on his way home, an offer had been made to him to enter the Russian service with pay at the rate of 1000 roubles a year. This he rejected, likewise from patriotic motives. Quite incidentally he brings in, under the year 1733—having already recorded his return from captivity—that he had “made a campaign with the Kalmuks against the Chinese.” Hence, probably, the legend that he had led the Kalmuks in battle.

Mongol Atlas.

NOTE A.—*The Jesuits and the Chinese Maps of Middle Asia.* In the *Asiatic Journal*, vol. ix., September-December 1832, pp. 161-166, 321-325, there is an anonymous article (by Klaproth?) on Chinese Geography, in which it is stated that the first mention of map-making in Chinese records dates from 1109 B.C., after which allusions are frequent. Under the Sung (A.D. 928-1027) there was a map of the Western Countries. Maps were made, too, by command of Kubilai, “but the finest geographical work which the Mongols who reigned in China have left us is a large atlas of the Empire. This work may bear a comparison in every respect with the labours of Ptolemy, and in some points surpasses them.” The date was early fourteenth century and the title *Kwang yu thoo*—geographical tables.¹ The oldest printed edition (Petrograd Academy) is in one volume (1561); the second is in two volumes (1595); a copy is in the Bibliotheca Magliabechiana, Florence. It was brought from China by Carletti, who was in that country in 1599. It contains forty-two maps accompanied by Statistical Tables. Carletti added to it many names in Italian characters. The third edition is the most complete. It was brought to Europe by Sir G. Staunton and deposited with the rest of his invaluable collection of Chinese books in the library of the Royal Asiatic Society.² It was published in 1615 (2 vols. sq. folio), and is divided into squares of 100 *li* (300 to the degree). Vol. ii. map 23 is of the Western Countries—*Se yu thoo*; map 24, of the Northern Countries or of the Desert of Sand—two sheets. Martini's Atlas was based upon this work.

Jesuit surveys under Kang-hi.

Coming now to the Jesuits and their work, we learn from Du Halde, quoted by d'Anville in the preface to his Atlas (ed. 1737), that from 1707, the Jesuit Fathers, at the command of Kang-hi, began those labours which resulted in the general map of the Chinese Empire, presented to the Emperor in 1718. The Fathers Bouvet, Régis, and Jartoux³ were first sent to survey and determine the position of the Great Wall (4th July 1708). De Mailla states that they set out from Peking “at the beginning of 1708.” They went to Shan-hai-kwan and followed the Wall thence to near Su-chow, the northern extremity of Shen-si. From there they descended to Si-nin and returned to Peking.⁴ Du Halde tells us that the map they brought back with them was 15 feet long, which, considering the length of the Wall, cannot be called excessive.⁵ Previous to

¹ “The *Kwang-yu-too*, a large atlas of China, was compiled by Choo Sze Pun, who in 1311 and 1312 visited every part of his native land to render his work correct.”—Will. Huttman, “On Chinese and European Maps of China,” *Journal of the R.G.S.*, vol. xiv.

² Enquiry at the R.A.S. rooms in Albemarle Street, in 1916, elicits the lamentable fact that this precious volume has “disappeared.”

³ Bouvet, Joachim, b. 1656, was one of the six Jesuit mathematicians sent out to China by Louis XIV. in 1685 at the suggestion of Verbiest; he arrived in China 1688; d. Peking 1730. Régis, Jean Baptiste, b. 1664; arrived in China 1704; d. Peking 1738. Jartoux, Pierre, b. 1669; arrived in China 1702; d. Peking 1720.

⁴ De Mailla, *Hist. gén. de la Chine*, vol. xi. p. 314.

⁵ It appears that the Wall had already been examined, if not surveyed, by a Jesuit before 1694, when Ides was in Peking, a fact that seems hitherto to have escaped attention. He writes:

“Father Alexander, Jesuit, informed me that he, by order of the King, journeyed along the said Wall from the West, where it begins, to the S.E., as far as the Corsische lake (*see*), and found that it is 300 German miles long, and that if it were set down on the flat it would measure quite 400 miles. This Wall is carried over high mountains and has four entrances: namely the Leaton [? Shan-hai-kwan], the Dahur [? Si-fen-kau], the Lelinger [? Selenghinsk], and the Tibetan [? Kia-yu-kwan], and is of

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this, in 1700, they had greatly pleased Kang-hi by making for him a plan of the environs of Peking.¹

In 1709 Régis, Jartoux, and Fridelli² made a map comprising Leao-tong, the northern limits of Corea, the territories of the Yu-pi-ta-se, the habitation of the Ke-tchinta-se and all the districts of the Mongols from 45° N. latitude to above the 40th degree [*sic*].³ The same Fathers, also in 1709 (December 10th), began their survey of the province of Pe-che-li, finishing it on the 29th June 1710. On the 22nd July they received orders from Kang-hi to map out the new settlements established by him on the Saghalien-Oula (river Amoor). This work they completed by the 14th December 1710, including the Governments of Tsitsikar, Merghen, and Saghalien-Oula-hoton.⁴ They were not allowed to visit the mouth of the Amoor. In 1711 Fathers Régis and Cardoso⁵ undertook the province of "Chan-tong," while Jartoux, Fridelli, and Bonjour,⁶ "who had gone to the district of Hami," surveyed nearly the whole of the Khalkha territory. Ho-nan, Kiang-nan, Tche-kiang and Fo-kien fell to the historian De Mailla, and to Henderer.⁷

The whole of the surveys and journeys being completed by 1716, including the fixing by astronomical observations or geometrical measurements of the co-ordinates of 641 points both of latitude and longitude, and collecting in the Provincial Administrative Institutions whatever material could be found,⁸ the indefatigable Fathers then set to work in Peking to co-ordinate the results, and in 1718, as already stated, they were able to lay their great map of the Chinese empire at the feet of the sovereign.

The speed at which the Jesuits must have worked and travelled is remarkable, even allowing for the facilities they would everywhere receive; and it is evident that, in most cases, the survey can only have touched the principal routes. That they were hampered in their work by Manchu and Chinese jealousy we know from Father Gaubil.⁹ "Les mandarins chinois et Tartares qui les accompagnaient gênaient extrêmement; ils avaient

such breadth that eight horsemen can comfortably ride upon it abreast." Izbrants Ides, *Driejaarige Reize*, etc. T'Amsterdam, MDCCLIV., p. 138.

The Archimandrite Palladius says that the Wall was unknown in Marco Polo's time; it hardly existed. "The Wall as we know it, with its grandiose battlements and embrasures, is due to the Mings, who all the time had to fight the Mongols."

¹ See for interesting details the paper by M. l'Abbé Brucker: "Communication sur l'exécution des cartes de la Chine par les missionnaires du xviii^e siècle d'après des documents inédits," in *IV^e Congrès International des sciences géographiques tenu à Paris en 1889*, vol. i. pp. 378-396.

² Fridelli, Ehrenbert Xavier, b. 1673; arrived in China 1705; built the church of St. Joseph in Peking; and died there 1743.

³ The Chinese distinguished the various native tribes of the Amoor by the way they wore their hair, their clothes, etc. The Yu-pi-ta-se were those who dressed in fish-skin garments. On d'Anville's map, *Carte Générale de la Tartarie chinoise*, we find the right bank of the Amoor, towards the mouth, inhabited by "Ketchen, Nation qui a un langage particulier nommé [*sic*] Fiatta"—apparently Ghiliaks.

⁴ The small town, still existing, opposite Blagovieshchensk, which afterwards gave way in importance to Aigun, some twenty miles down-stream.

⁵ Cardoso, François Jean, b. 1676; arrived in China 1710; d. Peking 1723. Drew up with Régis a map of Chantung 1711; with Du Tartre a map of the Hami district 1711-1712, and certain provinces of China proper; all of which form part of the Great Atlas or map published in Peking 1718. Du Tartre, Pierre Vincent, who signed himself *De Tartre*, b. 1669; arrived in China 1701; d. Peking 1724. Letters of his to Father Régis regarding maps are published by M. l'Abbé Brucker, as above, note 1 (pp. 393-4).

⁶ Bonjour, Guillaume, an Augustine priest, b. 1670; d. China 1714. The only one of all these geographers not a Jesuit.

⁷ Henderer, Romain, b. 1669; arrived in China 1707; d. Nanking 1744.

⁸ Mr. K. Waeber, in the explanatory note to the Index of his excellent map of China, published in sheets by Ilin, St. Petersburg, states incorrectly that they fixed the co-ordinates of 600 points by astronomical observations. This index was published (in Russian) at Vienna, in 1894, by Holtzhausen. I made great efforts in Petrograd to find out what had become of Mr. Waeber, who at one time was Russian consul or agent in Corea, but in vain. I refer to his map in connection with Spathary's journey, Vol. II. p. 329.

⁹ Gaubil, Antoine, b. 1688; arrived in China 1722; d. Peking 1759.

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des ordres pour ne laisser aller les pères où ils voudraient. . . . On voulait encore aller aux bouts orientaux de Tartarie et occidentaux de Chine et Tartarie . . . L'empereur refusa net."¹ So that apart from the Kalmuks there was good reason why the Jesuits failed to reach Sungaria.

Du Halde claims, nevertheless, and, on the whole, correctly, that "our [Jesuit] maps of Tartary, even in the parts nearest China, are not only new, but also the first that ever appeared either in China or Europe."² He knew nothing, evidently, of Godunoff, Remezoff, or Spathary, and their maps can hardly be said to have "appeared."

In China proper the Jesuits had the maps of their predecessors, Ricci, Martini, and Verbiest, to help them³—though the fact is ignored by d'Anville—and, of course, whatever existed in the way of native Chinese maps and geographical information. Du Halde expressly states that Tibet was mapped neither in the same way nor by the missionaries themselves from their own work, but by them from the route-maps of Tartars [Manchus] belonging to the Mathematical Board, sent out for the purpose by Kang-hi, but instructed and directed by the Jesuits.

From Father Souciet we learn that the western portion of the map of 1718 was made in the same way. In his valuable work, *Observations mathématiques*, etc.,⁴ he tells us (tome i. p. 146, par. ix.): "Le p. Régis a envoyé en France une carte des Pays qui sont entre la Chine et la mer Caspienne. Elle a été faite sur des mémoires des Tartares et des mandarins. J'ai eu entre les mains plusieurs routiers de Hami à Harcas, séjour de Vang-raptan [*sic*]. Un de ces routiers tartares a été traduit par le p. Parrenin, il est excellent. Il marque jour par jour le chemin et le rhumb. *C'est sur ce routier que j'ai déterminé les positions de Tourphan, de la source de l'Ili, de Kor, de Harcas et de Palkasi.* La carte que le p. Régis a envoyée et qui est venue de dedans du palais,⁵ a suivi la route marquée dans le routier dont je me suis servi; et les lat^{es} et long^{es} qui résultent du routier ne sont pas différentes de celles de cette carte. Pour les autres lat^{es} et long^{es} j'en ai rendu raison dans mes remarques sur la relation chinoise de Toulichen."

Gaubil⁶ states that Parrenin's routier was given to Gerbillon by a nobleman of the court who had been sent by Kang-hi to Tsevan Araptan. This nobleman was well up in routes (instruit des routes); he knew the sphere, and had the road measured as exactly as possible. He went from Kia-yu-kuan to Hami, Hami to Turfan, and Turfan to Harcas-Ili. He measured day by day "les rhumbs de vent," and the distances from place to place in ordinary measure. He gives seventeen points. Gaubil says that Harcas was the camping-place of Tsevan Araptan, on the east bank of the Ili, and was also called Kongkis—presumably Khorgos, but perhaps confused with the river Kunghes.

"When⁷ the maps drawn up by order of Kang-hi appeared at Peking the Jesuits forwarded to France drafts of them on which a very few only of the original names were transcribed in Roman characters. These rough drafts, which were very superficially executed and translated, were put into the hands of the celebrated d'Anville, who reduced them and published them in the work of Duhalde [Du Halde]."

W. Huttman (*Journal R.G.S.* xiv., 1844) says the Kang-hi map was "engraved in the Chinese and Manchu languages—China proper being in the former, and Chinese

¹ Quoted by M. l'Abbé Brucker in the article just referred to.

² Vol. iv. *Geographical Observations*.

³ An example of Ricci's great map is in the map-room of the R.G.S., see papers by Mr. Edward Heawood and the present author in *Geogr. Journal*, vol. 1., 1917, pp. 254-276; Verbiest's in two hemispheres may be seen in the British Museum; Martini's Atlas is comprised in Blaeu's Atlas. I give some details in Vol. II. p. 220.

⁴ *Observations mathématiques, astronomiques, géographiques, chronologiques et physiques tirées des anciens livres chinois, ou faites nouvellement aux Indes et à la Chine par les Pères de la Cie. de Jésus*, rédigées et publiées par le Père E. Souciet, de la même compagnie. Paris, 1729.

⁵ As mentioned by Gaubil. See p. cxc.

⁶ In the same work, p. 177, letter dated 6th October 1726.

⁷ *Op. cit.* p. 325.

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Tartary, Thibet, and Corea being in the latter language. *A copy of this map is in the East India Company's library in London.* Unfortunately it seems to have been lost, probably before or during the transfer of the Company's library to the State. But the sub-librarian, Mr. Ellis, was kind enough to point out the existence of various Chinese maps in King George IV.'s gift to the British Museum, one of which proves to be the western third of an original example of Kang-hi's map.

In *Annales de géographie*, 1899, viii. pp. 172-5, "Les Travaux géographiques des Jésuites en Chine," Father H. Havret (recteur du collège de Zia-ka-wei, près Chang-hai) says that the Du Halde (d'Anville) maps were one-half the size of the Chinese editions and contained only walled towns, prefectures, and sub-prefectures. On the other hand, Sommervogel and Backer under *Régis* say that an atlas of fifty maps was engraved by d'Anville at Paris in 1730, and united in a single volume, Paris, 1785. "This Atlas was engraved or printed at Peking in 1718. We have a copy which is identical with that of d'Anville, to which it corresponds, feature by feature, *with the same degrees and of the same size*. Only there are more names on the Chinese Atlas than on the French Atlas. We know that the Atlas was engraved by d'Anville from copies sent from Peking . . . we have another copy (of the Chinese atlas), edition 1832, on the same scale, but engraved on broad bands, instead of on separate maps. It has for title *Hoang tchao*. . . ." These statements are, apparently, contradictory.

D'Anville's Atlas
1737 and later.

In Ritter's *Eastern Turkestan* (Russ. ed.), ii. p. 363 n., we read: "Many years after 1737 the St. Petersburg Academician Stählin received from China a gift of an atlas of sixteen maps. He wrote to Büsching (see *Magazin für die neue Historie und Geographie*, iii. 576) that comparing them with d'Anville's the latter proved to be 'a romance rather than a real geography of China.'" This severe opinion, according to Grigorieff, was Rossokhin's verdict, based, erroneously, upon the fact that the Jesuits used the southern, Rossokhin the northern (Peking) dialect. Examples of this atlas of separate maps of the Provinces of China are not, it seems, uncommon. There is one in the British Museum, another in the Moscow F.O. Archives, a third in the R.G.S. map-room, and doubtless others elsewhere. Speaking of the Jesuit map presented to Kang-hi, Klaproth says:¹ "Ce travail précieux fut gravé à Peking; les missionnaires jésuites en envoyèrent un exemplaire à Paris, qui fut présenté au roi et resta jusqu'à l'époque de la Révolution dans sa bibliothèque particulière à Versailles. Des calques de ces mêmes cartes, traduites en Chine, furent remis par le P. Duhalde au célèbre d'Anville, pour qu'il les réduisît et soignât leur publication. Ces calques n'étaient que des extraits fort incomplets des originaux chinois et manchoux; et, de plus, les noms avaient été traduits par une personne peu versée dans la langue chinoise. Il ne faut donc pas attribuer à d'Anville les erreurs que présentent les cartes faites d'après ces calques, et insérées dans la description de la Chine du P. Duhalde."

From Monsieur Henri Cordier we learn that "Les cartes originales des Pères de la C^{ie} de Jésus sont déposées aujourd'hui aux Archives des Affaires Étrangères. . . . Elles . . . forment un Grand Atlas (No. 1648a); elles sont sur papier de Chine, montées sur du papier fort et entourées d'une bordure de soie bleue chinoise. Les noms des villes sont marqués en caractères chinois, aussi on a ajouté à l'encre rouge la prononciation russe du plus grand nombre."² Presumably these are the MS. originals from which the Chinese versions on jade, copper, and wood were engraved.³

It appears, then, that though there is still much in the story of the Kang-hi Jesuit map that is obscure, that part of it with which we are concerned was based upon native (Chinese) information only. The Jesuits themselves got no farther west than Hami, or

¹ *Magasin asiatique*, etc., Paris, 1825, tome i. p. 305.

² *Sinica*, 2nd edition, col. 148.

³ Owing to the war I have been unable to inspect these maps.

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at most Turfan; and the maps in d'Anville's Atlas based upon their labours show, naturally enough, an almost complete ignorance of Sungaria. It follows that, officially, the Jesuits can have had nothing whatever to do with the making of Renat 1.

The d'Anville maps, however, represent only the earlier Jesuit labours in the West.

Jesuit surveys under
Kien-lung.

Many years later, in 1756, Kien-lung, having, thanks to internal dissensions, taken easy possession of Sungaria, sent a special Commission to make a detailed and exact description of the New Frontier (Sin-tsian), geographical, ethnographical, and statistical. The Jesuits were engaged to extend and complete the work of their predecessors in mapping the new dominions, and the learned Father Brucker¹ remarks that the determinations of latitude and longitude and the other observations made by them served as the foundation for the notices and maps of "the western countries" (Si-yu) to be found in the great geographical works published at Peking under Kien-lung, especially in the "Great Geography of the Empire of the Thai-thsing" (*Thai-thsing-y-thoung-tchi*), often reprinted with successive additions, and in the "Description of the Western Countries."² It is from these Chinese works that the Sinologues of our century have drawn a certain amount of information which has remained until to-day the principal and often the sole source available to geographers for those parts of Central Asia.³

The Fathers Rocha and Espinha, Portuguese Jesuits,⁴ left Peking on the 21st March 1756, by order of the Emperor, to make a map of Sungaria, of which he now thought himself master. They were accompanied by two lamas, "assez bons mathématiciens pour le pays," and two Chinese or Chinesified Manchus, members of the Astronomical Board of Peking. Before they left, Kien-lung received them graciously in audience, making Rocha a mandarin of the third class and Espinha of the fourth, to facilitate their travels and studies. Nothing was heard of them until a letter arrived from Father Rocha, presumably a little before the date of Father Amiot's letter here quoted, viz. Peking, 24th November 1756, in which he explains the difficulties they had encountered owing to Amursana's rebellion. After several months' delay the Jesuits continued their journey westward, Rocha by a northerly route as far as the river Ili, mapping as he went; Espinha by a southerly route, intending to reach Ili from the west. Having finished their labours they were to meet at Su-chow and there combine their work into one map, to be presented to the Emperor. Rocha stated that he had seen the "famous" *miao* (temple) built by Galdan-tseren near Ili, but in ruins, and the place strewn with corpses . . . all the rest of the country being ravaged.⁵ Father Gaubil, writing to Joseph Nicolas de l'Isle (*sic*) in Paris under date Peking, 14th November 1757, states that Rocha and Espinha had been at Hami, Barkul, Turfan, Manas, Borotala, Ili, etc.; and had made observations for latitude and calculations for longitude from the routes, rhumbs, and distances, and would have

¹ *Positions géographiques, déterminées par deux missionnaires jésuites dans le Turkestan Oriental et la Dzoungarie en 1756, d'après deux lettres inédites des P.P. Amiot et Gaubil*, par le P. Brucker, de la compagnie de Jésus, Lyon, 1880. Amiot, Joseph Marie, was b. 1718; left home for China 1740; d. Peking 1793.

² *Hoang-yu-si-yu-thou-tchi*, 1782. This, the first edition, is in 48 books (8 vols. in 8°) and has long been very rare even in Peking, as Mr. Grigorieff tells us; he knew of one copy only, that belonging to Mr. Zakharoff, late Russian consul-general in Kashgar, who acquired it accidentally in Peking. Before this a book on E. Turkestan, called *Si-yu-vin-Tsian-lu*, had been published (1770), the greater part of which was excerpted by Ritter and Grigorieff himself.

³ The author refers to Klaproth, *Magasin asiatique*, 1825, t. i.; *Asia polyglotta*, 1823; *Carte de l'Asie Centrale dressée d'après les cartes levées par ordre de l'Empereur Khian-Loung par les missionnaires de Peking*, 1836, etc.; Stanislas Julien, *Éclaircissements ajoutés à l'Asie Centrale de M. Humboldt*, t. ii. 1843; *Journal asiatique*, 4^e Série, t. viii., 1846; et *Nouvelles Annales des Voyages*, année 1846, t. viii., and to G. Pauthier "dans les notes de son édition de Marco Polo."

⁴ Rocha, Felix de, b. Lisbon 1713; arrived China 1738; d. 1781. Espinha, Joseph d', b. 1722; arrived China 1751; d. 1788. Huttmann, *op. cit.*, calls them "Spigahu and Rocha" and two lines later mentions "Erpinha and D'Arrocha" as different people.

⁵ This is the only mention I have found of this temple—so much for fame!

THE RENAT MAPS

liked to have time to observe the occultations of certain stars, satellites, etc. Gaubil adds : "The map they have made of that country is at the Palace, and it is not public here ; the two fathers will certainly send it to Portugal, it is a great improvement on what one had before. At Lisbon, no doubt, it will be published. . . ." ¹ It never was ; probably, as Father Brucker says, because at that time Pombal was burning and otherwise persecuting the Jesuits. It has never been published in Europe. Gaubil was unable to procure a copy owing, it seems, to the jealousy of his Portuguese colleagues, but a mandarin communicated to him the following eighteen positions, of which the first nine were the work of Rocha, the others of Espinha. I give them with the original notes, either Rocha's and Espinha's, or added by Gaubil :

	N. Lat.	Long. W. of Peking.	Notes.
Parcol [Barkul]	43° 39'	23° 0'	There is a Chinese garrison at Parcol.
Aptac	45° 0'	24° 26'	
Paitac	44° 43'	25° 0'	
Moley [Murui]	43° 45'	25° 36'	
Kimosa	43° 40'	26° 52'	
Ouloumotsi [Urumtsi]	43° 27'	27° 57'	Also called Oromtchi, another Chinese garrison.
Gantsihay	44° 13'	30° 54'	
Tsieul	45° 30'	31° 0'	
Polotala [Borotala]	44° 50'	33° 30'	Name of a river ; take the middle of its length.
Ili [Kulja]	43° 56'	34° 20'	Name of a river, it is where many rivers join and enter the Ili. It was the usual camping-place of the King of the Eleuths, now destroyed . . .
Loukikin	42° 48'	26° 11'	
Touloufan [Turfan]	43° 4'	26° 45'	
Ouchaketar [the lake is evidently Bagrach-nor]	42° 16'	28° 26'	There is a lake there more than 40 leagues round, which is not marked in Du Halde.
Harachar [Kharashar]	42° 7'	29° 17'	
Kourle	41° 46'	29° 56'	
Tchourτους [Yulduz]	43° 17'	30° 50'	Also called Oultous.
Kongkis [r. Kunghes]	43° 33'	32° 0'	
Hache [r. Kash]	44° 8'	33° 0'	

Lob-nor, according to the two Fathers, has its centre 2° 20' south of Hami and about 4° west of that town, for which they accept the position in Du Halde, viz. Lat. 42° 53' 20", Long. 22° 23' 20" west of Peking. Father Gaubil adds that he is "almost sure" that Ili is 3° 30' more to the west than it is shown and the rest in like [?] proportion, Turfan, 30' to 35' ; Kharashar, 1° 45' ; Yulduz and Antchihay (?), 2° 40' ; Borotala, 3° 20'. But Father Brucker, whom I have followed so far, remarks that where comparison can be made Rocha and Espinha are much nearer to the truth than Gaubil.²

In 1760 the same two Jesuits, accompanied by F. Hallerstein,³ were again sent to the West, Kien-lung having finally triumphed over the Kalmuks (1757). Father Amiot, in *Mémoires concernant les Chinois*, 1776, published a list of forty-three geographical positions determined by Rocha and Espinha in 1759 and 1760 "in eastern and western Turkestan." These positions include Kucha, Ak-su, Uch, Kashgar, Yarkand, Keria, Andijan, Marghelan, and Tashkent, but none of the eighteen in the list of 1756.

In the *Bibliographie de la Société de Jésus*, under "Rocha," I find "Les cartes du pays

¹ This, with ten other letters of Gaubil, was published by Klaproth in *Journal asiatique*, 1832, t. x., and also in *Lettres édifiantes*, edition of Panthéon Libraire, 1843, t. iv. Father Brucker remarks that Klaproth's copies are not always faithful to the originals.

² Possibly this erroneous opinion of Father Gaubil had something to do with Klaproth's grave error noted here on p. clxxi. In the anonymous article, already quoted, in the *Asiatic Journal* (vol. ix. p. 325) it is said : "In a letter of Arocha [*sic*] and Espinha dated 26th November 1759 they say that from their observations it is certain that the latitude of the city of Ele [Ili] is 39° 35' and that its longitude is 6° and some minutes more to the West than it is placed on the map of d'Anville."

³ Hallerstein, Augustine, b. 1703 ; arrived in China 1738 ; d. Peking 1774.

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des Eleuthes, Pekin, 1756, ont été publiées de nouveau en 1864 à Ou-tchang dans la Géographie intitulée *Hoang thae Tchong wai i tong iu tou*," and under "Espinha" we have, as his production, *Tabula Chorographica (Imperatoris jussu) Provinciarum quae Tourgouths et Eleuthes appellantur Imperio Sinico anno 1757 adjectarum*.

Amiot, again, in his *Monument de la conquête des Eleuths*¹ in *Mémoires concernant*, etc., under date Peking, 4th October 1772, writes :—

"J'attendois aussi que la carte, que l'Empereur a donné ordre de graver, fût rendue publique." . . .

"J'aurois pu joindre ici une carte, telle quelle, du pays des Eleuths ; j'ai mieux aimé différer à l'année prochaine, parce que je pourrai l'avoir, pour lors, plus exacte et beaucoup plus complete." . . .

"Les nouvelles Hordes de Tartares, Torgouthes et autres qui, l'année passée et cette année encore, sont venus se mettre sous l'obéissance de l'Empereur, au nombre de plus de cent mille familles, ont fait naître dans l'esprit de ce grand Prince l'idée de joindre la carte de leur pays à la carte déjà faite du pays des Eleuths. Il y a déjà plus de cinq mois qu'un de nos Pères géographes est parti pour remplir cet objet."

In the *Journal asiatique*, 1846, t. viii. pp. 228-252, 385-445, we find :—

"Notices sur les pays et les peuples étrangers, tirées des géographes et des historiens chinois ; par M. Stanislas Julien. Description de la province d'Ili, extraite du *thai-thsing-i-tong-tchi*, ou géographie universelle de la Chine." From this we learn : "Of this work there are three editions extant in 354, 424, and 500 books. It was published first in 1743 by order of Khien-long. Each province is fully described, there is a general map and also special maps of each province." M. Julien continues :

"On ne possède en Europe que les deux premières éditions de la géographie universelle. Les additions de la seconde édition, qui a 70 livres de plus que la première, se rapportent principalement aux pays conquis en l'année 1755 et suiv. par l'Empereur Khien-long, et qu'on appelle Sin-Khiang 'La nouvelle frontière' et à plusieurs contrées qui payent seulement un tribut à la Chine, sans faire partie de son territoire."

M. Julien gives a translation of the description of the province of Ili from the *Kin-ting-sin-Kiang-tchi-liao* (Book I. fol. 5) adding the etymology of place-names from the *Géog. Dict.* published in six scripts by order of Kien-lung and called *Si-yu-thong-wen-tchi*. Some of these etymologies may still be found useful.

To quote again the anonymous article (*Asiatic Journal*, vol. ix. p. 325) : "On their [the Jesuits'] return from this distant expedition Khien-lung caused new maps, of different dimensions, to be made of the whole of his empire and the contiguous countries ; they were on scales of 1 inch, 2 inches, and 2½ inches for each degree of latitude respectively. The superintendence of this work was assigned to Father Benedict [F. Benoit].² As soon as it was completed, he ordered copies of two of them to be cut on wood ; the largest, that is the one on a scale of 2½ inches for each degree of latitude, he directed to be engraved on plates of copper. This last edition consists of 104 plates, each 2 feet 2 inches wide, and as they respectively comprehend five degrees of latitude, this makes the length of each 1 foot 2½ inches, Chinese measure.³ A beautiful copy of this map is in the East India Company's library. It may be considered as perfectly accurate in respect to all the positions laid down by the missionaries themselves ; but it is altogether incorrect in regard to places situated to the northward of the country of the Manchus and the Khalkha

¹ *Mémoires concernant*, etc., t. i. pp. 325-400.

² Grigorieff, in a note to Ritter's *Eastern Turkestan* (Russ. ed.), Part II. p. 405, says that Plath, *Geschichte östlichen Asiens*, i. 837-839, Ritter himself, and others, base their statements chiefly on Father Benoit's (Benedict) letters in *Lettres édifiantes et curieuses*, t. xxiv. pp. 352-356, 381-384, 386, and 424, but Grigorieff failed to find the said information in the edition he consulted. It is well known, of course, that the editions differ greatly, and that it is therefore not always easy to identify passages cited.

³ Yet the Chinese foot now = 14.1 English inches (Morse, *op. cit.* vol. i. p. xxxix). But see p. 438.

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Mongols as well as those *north of Ele [Ili] and west of Kashgar, Yarkand, and Khotan, which city is called on this map Eleise Khotan.*"

So that even the Kien-lung map, according to this writer, is altogether incorrect for Sungaria proper, but this is an exaggeration.

W. Huttman, *op. cit.*, writes: "Spigahu [*sic*] and Rocha's *Survey of Calmuck Tartary and Eastern Turkestan* is included in a new edition of Kang-He's map that was engraved by order of the Emperor Keen-lung about 1761, in ten long rolls, comprising above 100 sheets. A copy of this splendid but incorrect work, which for brevity I will call 'Keen-lung's Map,' was presented in 1825 to the East India Company's library in London by Mr. John Reeves, then at their establishment in Canton. This map includes not only the Chinese Empire but also the whole of Northern Asia; but much better maps of Asiatic Russia have been published at St. Petersburg. The names in China proper are in Chinese, and in the other parts of the map in Manchu. I have translated for the Hon. East India Company the whole of the Manchu and a considerable part of the Chinese division of this map, which is much more extensive and detailed, but less correct than Kang-he's. The principal faults in it are the boundaries between the Russian and Chinese Empires not being marked with sufficient clearness; the names of places in China Proper, which are thrice as numerous as in Kang-he's map, being in very small characters, and in many instances much crowded; and what is of much more importance, as it greatly diminishes its value as an authority, the longitudes, particularly at some distance from Peking, being generally too high, although in Manchuria they are frequently too low."

Finally, let us hear M. Havret: ¹

"De bonne heure, ces cartes, réduites à l'échelle de l. 1,000,000, furent gravées sur bois et livrées au public. De nos jours elles s'impriment encore en Atlas à Ou-tchang-fou telles qu'elles sont sorties des mains des missionnaires, dont le nom n'est pas même prononcé dans la préface de ces Atlas. Le procédé est très chinois; ce qui ne l'est pas moins, c'est que depuis deux siècles les lettrés dans les rééditions successives qu'ils font de leurs chroniques provinciales semblent ignorer absolument l'existence de ce livre, et continuent à illustrer leur histoire des cartes les plus invraisemblables, de pures monstruosité."

M. Camille Imbaut-Huart² says the edition he uses of the great Kien-lung Geography and Atlas of Central Asia is of 1872, in twenty-eight books. It is called *Si-you-t'ou-tché*.

With the map in the India Office, which the authorities kindly lent to the R.G.S. for my benefit in the summer of 1916, is the following MS.:

"Translation of the Title or Legend on Roll 1 of the Chinese Map in 10 Rolls. By R. K. Douglas.

"In the course of the many years during which we have been annexing territory we have always had regard to the sacred schemes [of the previous Emperors].³

"[NOTE.—The Map of the World was begun in the reign of the Emperor Kang-he [1662-1722]. The Imperial Ancestor ordered men to visit every tribe, to make investigations, and to map the country. In case they were not able to reach any district in person, they were directed to make enquiries about it, and to embody the result in the map which was to be engraved on copper that it might descend to future ages.]

"It is now a fact that we have extended [our dominion] as far as Ku-sau [Fahan].

"[NOTE.—Last year *Chun-kieh-urh* (Soungar) was pacified, and all the western tribes were carefully registered. In consequence of which the censor Ho-Tsung-kwo was ordered to conduct some Europeans (or a European) by the western and northern roads to *Ko-go-chêh-kêh*, to calculate its position, to note the climate and seasons, and to examine carefully the mountains and valleys, the practicable and impracticable roads and

¹ *Op. cit.* pp. 172-175.

² *Recueil de documents sur l'Asie Centrale*, Paris, 1881.

³ The brackets, square and round, in this translation are Sir R. K. Douglas's.

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paths, both far and near, and to make a map thereof in accordance with the rules previously laid down.]

“These are not mere boasts. The military officers who were engaged in pulling down and building up should together with the Commissioners be rewarded. Let them enter the Imperial Presence and reverently report. The rebel Passes having now been pierced, the Chinese ministers desire to see peace and prosperity spread far and wide. We continually look back at the tranquillity which prevailed during the Shüh dynasty and long to renew it.

“An Imperial Note written on the sixth month of the year *pingteze* of the reign of the Emperor Keen-lung [1756].

“I venture to speak of the extension [of territory]. Yen Pëh who had acted in accordance with the plans of our predecessors was after this ordered to cease from slaughter; since the horses and cattle of *San-yëh-loo* have been left without any one to tend them and the military posts have all been attacked and taken.

“[NOTE.—In the year 1755, when Chun-kieh-urh (Sungaria) was pacified, Ho-Tsung-kwo and others were ordered to take measurements and to make a map [of the District]. In the year 1759 a census was taken of all the Mohammedan tribes, and *Ming-yan-too* and others were again sent to settle and pacify the country, to watch the times and seasons, to regulate the Government, and to fill in their observations on the former map that it may descend to all ages as evidence of the truth of these statements.]

“The Civil rule and appointed times of the present Dynasty are now respectfully received and even amid the cold and warmth of sunless valleys there is not to be found a single disturber of the Royal rule of the Tsing Dynasty, or of the tranquillity of the country. May this inheritance continue to all future generations!

“An additional note written by Teë-Tseen-Yun in the eighth month of the year 1760.”

NOTE B.—*Issik-kul and the River Chu*. Any one who looks over the maps of this region, old and new, will be struck by the fact that, to put it roughly, they connect river and lake or disconnect them alternately. The India Office version of the Kien-lung map gives the former view, the Royal Geographical Society example the latter, and so it goes on up to our own time. I have already spoken of the way in which the Kalmuk map deals with this matter, and, having no personal knowledge, I will content myself here with putting the reader in possession of some of the evidence in the case, with further reference to other sources.

The authorities are: Lansdell, *Russian Central Asia*, i. 157. Schuyler, *Turkistan*, i. 54. Veniukoff, *Opuit voennavo obozrenia russkikh granits v Azii*, St. Petersburg, 1873. Sievertsoff, *Puteshestvia po Turkestanskomu krayu i izsledovanie gornoj strani Tian-shanya*, St. Petersburg, 1873. *Journal R.G.S.* vols. xxviii. p. clxiv; xxxi. 357, 359, 366-7; xxxii. 560, 562; xxxv. 215; xxxvi. 165, 268; xxxviii. 430-4; xxxix. 311, 318-28, 332; xl. 250-344, 375, 385, 391, 399, 449, p. clxvi, 250, 261, 348; xli. 144; xlv. 383. *Tarikh-i-Rashidi*, p. 59 n., p. 78 n. (Kostenko), p. 79 n., p. 367. Bretschneider, *M.R.*, vol. i. p. 227, ref. Huan Thang's travels; vol. ii. pp. 244-5, ref. Kostenko; and others. Putimtseff's journey in Sungaria, 1811, published in *Sibirsky Viestnik*, was translated by Klaproth, and served Ritter as one of his most valuable sources.

Schuyler says: “The Tchu takes its rise in the Tian Shan, to the south of the Alexandrovsky range, and to the south-west of Issyk kul. At the head of the Buam pass the river is about 4 miles distant from the Issyk kul. There is now a small channel connecting the lake with the river, and in spring floods the river is as apt to flow into the lake as the lake is to flow into the river. Lake Issyk kul, which is a large body of water, 120 miles long by 33 wide, has at present no outlet. Its shores, however, afford

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indubitable evidence of numerous elevations and depressions. At one time the water evidently reached the bases of the surrounding mountains, at a height of some hundred feet above the present river.

“From the Buam pass, and along the valley of the Tchu, far below Tokmak, there is every evidence of the river having been formerly much greater and higher than at present. It is probable, therefore, that, at some previous time in the world's history, Lake Issyk kul—itsself fed by small streams and the snows of the surrounding mountains—discharged its waters into the Tchu. The Tchu, running north-westerly, with a broad and rapid stream, received perhaps also the water of the Great Lake Balkash, with its large tributaries, the Ili and the Karatal; then turned westerly and received other rivers, such as the Sarysu, to the neighbourhood of Fort Perovsky, and then, probably, ran in a south-westerly direction through the bed of what is now the Djani-darya and the ‘ancient bed’ of the Amu Darya until it emptied into the Caspian Sea. The Syr Darya and Amu Darya were, therefore, probably, only large branches of the river Tchu. When a depression of the basin of Lake Issyk kul took place the waters of the lake were prevented from emptying into the Tchu. The volume of water in the river was therefore much lessened, and owing to the spongy nature of the soil it formed large marshes and small lakes, and became entirely lost before it reached the meridian of Fort Perovsky. The rapid current of the Syr Darya, no longer turned by a powerful river coming from the east, impinged violently upon the opposite bank, creating large swamps and morasses, and finally found its way through them along the almost level steppe until it emptied by various channels into the northern end of the Aral Sea, as at present.”

Dr. Schuyler adds that on the shore of this lake old Chinese maps place the city of Tchi-gu and on the Catalan map of 1375 there is marked on the southern shore a Nestorian monastery, containing the bones of St. Matthew.

Lansdell says: “The origin of Lake Issik-Kul is very problematical. Some suppose that, in a distant geological epoch, it was part of the general system of the basin of the Caspian, Aral and Balkash. Again, from the fact that at the bottom of the lake buildings have been discovered, some have supposed that the locality has subsided and that the hollow thus formed has filled with water. Professor Romanoff, however, in his careful investigation, found no traces of subsidence of the ground, though the terraces on the shores show that the waters have receded by evaporation. Their former level was at least 200 feet higher than now, and the volume of water is lessening yearly. Popular traditions say that in the now submerged town was a well that one fine day burst forth such a quantity of water as to engulf both the city and the inhabitants. The lake is fed by at least sixteen streams from the south and thirteen from the north, but has at present no visible outlet. A Kirghis tradition says that the natives wishing to rid themselves of its waters dug out the canal of Kutemaldi, 3 miles in length, at the western end of the lake, thereby connecting it with the river Tchu. If so, however, they made a mistake in their levels, for, instead of letting the waters of the lake into the river, the reverse took place.

“The waters of the lake are now held, as in a cup, in a gigantic hollow formed by the branches of the Thian Shan, the dimensions of the hollow being much larger than the surface of the lake, which at a height of 5300 feet covers 3104 square miles or ten times the extent of the Lake of Geneva.

“To the Mongols and Kalmuks it is known under the name of Temuru-nor or the ferruginous lake, because of the large quantity of black ore covering the bottom that is thrown up on the shores in the form of sand. The Kara-Kirghese collect the ore and extract iron therefrom.”

Sievertsoff, p. 403, after describing how the Chu flows through a narrow gorge or crack to the north-east, with only room for a rough and uneven road on the right bank 3 to 4 sazhen wide and 1 to 3 sazhen above the river, for about 9 versts, tells us that the valley

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widens out, while the Chu runs due east, between sloping hills. Leaving the basin of the lake the Chu turns south-east through a narrow rocky gorge, debouching on the basin of Issik-kul, but instead of flowing towards the lake immediately turns north-east, and again takes to a gorge and flows for 8 versts, to come out once more in the basin of the Issik-kul. It then goes due north and after sending off to the lake the Kutemalda channel, turns abruptly due west and enters the Buam gorge, the third between the upper Chu steppe (at the junction of the Katchkara with the Juvan Arik) and the lower. "It seems to me probable that the Chu once flowed into the Issik-kul and left it again by the Buam gorge; however, the way in which the bed of the river is separated from the lake is not clear to me, though, undoubtedly, it has been influenced by the accumulation of matter brought down by the Chu to the west end of the lake; and the formation of the crack of the second gorge had a part in the turning off the waters of the Chu from Issik-kul, though how I cannot say, not having followed the Chu to the Kutemalda."

He refers to Osten-Saken ("Sertum Tianschanicum," *Imp. Acad. of Sciences, St. Petersburg, Mem.* 7 ser. t. 14, p. 28) and mentions, also, Semionoff and Protsenko.

Veniukoff says the river Kutemalda, joining the Chu to Issik-kul, does exist, although it is stated in the *Geographical Dictionary of the Russian Empire* that "there is no geographical connection between the Chu and Issik-kul" (page 286).

Semionoff writes: "I conjecture that these conglomerates are the precipitated sediment of the lake itself. In such a case their existence over the whole basin of the lake at a considerable height above the present level proves that the lake in former times occupied a far more extensive basin. In confirmation of this theory the very nature of the Buam pass may be cited; its origin could never be attributed to the present unimportant Kashgar [*sic*], but must have arisen from the waters of the whole Issik-kul having forced an outlet for themselves through it and then rapidly subsided. So that, for a length of time subsequent to this, the river Chu may have had its source in Issik-kul till, on the gradual sinking of the waters of the latter, the Kashgar, formerly its tributary, became the source of the Chu. The diminution of the lake can only be accounted for in the following way—viz. through its tributaries gradually drying up, as the snow line in the mountains became higher, owing to the increasing dryness of the climate of the Continent and no longer supplying the deficiency occasioned by the evaporation of the waters."

The characteristics of the lake, it seems, are great depth, never-freezing waters, their brackish nature, and the fact that there are no islands.

Tus-kul means 'salt-lake,' the water being brackish and unfit to drink. Issik-kul means 'warm lake.' According to the *Tarikh-i-Rashidi* there were islands in the lake.

On Dr. Merzbacher's map to illustrate his expedition of 1902-1903, in *The Central Tian-Shan Mountains* (London, 1905), the river Chu is marked as a broad river leaving Issik-kul, with a little river Urta Tosoi joining it from the S. a few miles off. The same mistake is made on one of the most recent of Stanford's maps, plus Kutemaldi as a village or town.

Finally, I will quote the text to the new great *Atlas of Asiatic Russia*, published in Petrograd in 1914 by the Migration Department (*Pereselencheskoe Upravlenie*) which tells us that Issik-kul lies at an altitude of 5165 feet, is 171 versts long by c. 55 broad, with an area of 5180 sq. versts, and depth unknown, soundings having reached 200 sazhen (1400 feet). "The waters are brackish, *there being no outlet*. The river Chu flowing past the western extremity of the lake diverts to it the side-channel Kutemaldi, through which in spring it discharges part of its waters into Issik-kul."¹

¹ Since the above was written I find a long and very complete article on Issik-kul and the river Chu in Prof. Anuchin's *Zemleviedenie*, 1904, i. 1, by Mr. L. Berg.