

**A CONSIDERATION ON 清代乾隆期科布多疆域图**  
**SHINDAI KENRYUU-KI KOBUDO KYOUIKI-ZU**  
**(The Frontier-Area Map of Hovd in Qianlong Era of Qing Dynasty)**

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### **Introduction**

This paper is an attempt to examine ‘清代乾隆期科布多疆域图’ (*The Frontier-Area Map of Hovd in Qianlong Era of Qing Dynasty*), or *Shindai Kenryuu-ki Kobudo*<sup>1</sup> *Kyouiki-zu* (hereinafter referred to as *Kyouiki-zu*) as pronounced in Japanese, kept in the University Museum, the University of Tokyo.

This map has been already introduced and discussed by Onuma (2005). Onuma’s paper presents the historical background of Hovd, basic cartographic information, the features of the map, and an estimation of the production time, thus covers basic information of this map.

In this paper, the present authors try not to repeat the points discussed by Onuma, and will focus chiefly on the observation of the map *per se*. In so doing, we will attempt to point out some characteristic of this map.

### **1. Overview of *Kyouiki-zu***

The following is a brief summary of the overview of this map as presented by Onuma.

*Kyouiki-zu* is a coloured hand-drawn map, whose size is 177 cm by 139 cm.

It is currently held at the University Museum, the University of Tokyo, and was formally possessed by an archaeologist, Namio Egami. However, we are yet to find any information left by Egami himself as regard to this map, e.g. why, where, and how he acquired it. His son presumes that this might have been acquired in Beijing. There is no word or seal on the map which indicates the former possessor or the place where it was previously kept (Onuma 2005: 93).

The words are all in Chinese characters. It is in good condition, with only minor damages, and generally comprehensible (Onuma 2005: 96).

In the middle part of the left margin and right margin, we can observe ‘西’ *xi* (west) and ‘東’ *dong* (east) written in black ink, in relatively large size letter. On the top and the bottom of the left margin are ‘北’ *bei* (north) and ‘南’ *nan* (south), also in black and large letter. All other words are inscribed in red Chinese ink (Onuma 2005: 96).

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<sup>1</sup> The Mongolian name, Hovd, or “科布多” in Chinese is usually transcribed into Japanese as Kobudo.

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There are more toponyms used on this map than on *Qianlong neifu yutu* (*The Imperial Atlas of the Qianlong Era*), and we can see such things as: rivers; lakes (‘淖尔’ *naoer*)<sup>2</sup>; mountains, hills, and mountain passes (‘達巴罕’ *dabahan*)<sup>3</sup>; mountain pass roads (‘山口’ *shankou*); and deserts (‘戈壁’ *gebi*).<sup>4</sup> For some rivers, the fountain (‘水源’ *shuiyuan*) and the river source (‘河源’ *heyuan*) are indicated (Onuma 2005: 96).

On the other hand, there is not much difference between this map and *Qianlong neifu yutu* as regard to fortified cities, relay-stations, and watch-posts, which were built by the Qing Dynasty.

The fortified cities (‘科布多城’ *Kebuduo cheng*, ‘烏里雅蘇台城’ *Wuliyasutai cheng* ‘塔爾巴哈台城’ *Taerbahatai cheng*, ‘烏魯木齊城’ *Wulumuqi cheng*, ‘喀喇沙爾城’ *Kalashaer cheng*, ‘關展城’ *Pizhan cheng*, ‘巴里坤城’ *Baliken cheng*, and ‘哈密城’ *Hami cheng*) are indicated by double rectangles, and the castles of Ili region are not included in this map (Onuma 2005: 96).

The relay-stations and watch-posts are shown by small black circles, and they are connected by black dotted lines. The names of cordilleras and river systems outside the line connecting watch-posts are also shown relatively in details (Onuma 2005: 96).

On the outer edge, we can observe ‘哈薩克邊界’ *Hasake bianjie* (Kazakh boundary) and ‘鄂羅斯邊界’ *Eluosi bianjie* (Russian boundary) (Onuma 2005: 97).

The rivers and lakes are slightly painted in green, and mountains and hills are drawn from lateral view, in light indigo blue (Onuma 2005: 97).

The drawing method is closer to those of ‘欽定大清會典圖’ *Qinding DaQing huidian tu* (*Maps Attached to the Compilation of State Regulations of Great Qing, Compiled and Published by Imperial Order*), ‘欽定大清一統志’ *Qinding DaQing yitong zhi* (*United Record of Great Qing, Compiled and Published by Imperial Order*), ‘欽定新疆識略’ *Qinding Xinjiang shilüe* (*Knowledge and Stratagem of Xinjiang, Compiled and Published by Imperial Order*), and the maps in Heissig (1978)<sup>5</sup> than the method used in *Qianlong neifu yutu*. There are also certain commonalities with Renat Map 2<sup>6</sup> (Onuma 2005: 97).

The shapes of the mountains and hills, in particular, are more realistic compared with those in other maps, although they may not match the real shapes (Onuma 2005: 97).

River sources are often drawn in ravines (Onuma 2005: 97).

River systems are weighed heavily in this map – the descriptions of the rivers and lakes are meticulous, showing ‘水源’ *shuiyuan* (fountain) and ‘河源’ *heyuan* (river source) (Onuma 2005: 97)

There are 11 vertical lines and 14 horizontal lines drawn on the map – all red and straight. They form squares whose side measures 12 cm each. These lines do not represent latitude and longitude, and they do not match with the lines in *Qianlong neifu yutu*. These red lines were added at the final stage of map drawing. They only serve as a rough indication of distance. Unlike *Qianlong neifu yutu*, which was drawn with Western technique of land survey, this map was drawn by traditional method of the Qing Dynasty (Onuma 2005: 97).

The watch-post located in the eastern end is ‘津吉里克’ *Jinjilike*<sup>7</sup>, and the one in the western end is ‘會買拉胡’ *Hui Mailahu*<sup>8</sup> (Onuma 2005: 97-98).

As for the relay-stations, the description matches with *Qianlong neifu yutu*. Since the relay-stations leading to the inland via Ürümqi, Turpan, and Hami are not drawn, it is clear that emphasis was placed on Hovd, rather than Dzungaria (Onuma 2005: 98).

Distribution of nomadic tribes is also shown. In some places, the names of kings and nobles are noted with the locations of their summer and winter camps. This kind of information is rarely found in the maps of the Qing era (Onuma 2005: 98-99).

<sup>2</sup> Mo. *nuur*

<sup>3</sup> Mo. *davaa*, Ma. *dabagan*

<sup>4</sup> Mo. *govi*

<sup>5</sup> According to Onuma, *Kyouiki-zu* overlaps with Tafel 3-11, which are Katalog Nr. 674-687 in Heissig (1978). They are now all available online at <http://crossasia.org/digital/mongolische-karten/>

<sup>6</sup> <http://art.alvin-portal.org/alvin/view.jsf?file=3944> [Accessed on 1 April, 2015]

<sup>7</sup> Class. Mo. *Jingjilig*

<sup>8</sup> Class. Mo. *Qoni maiyilaqu*

The map had been updated since the late 30s of Qianlong Year, and was completed in Qianlong Years 42-43 (Onuma 2005: 100-101).

The above is Onuma’s overview of this map. Fig. 1 below shows the natural and artificial objects on the land surface, as well as some words (in Roman transcription), which are particularly noticeable on the map, in order to get the picture of the major contents of the map.

**Fig. 1: Rivers, Lakes, Mountains and Hills<sup>9</sup>, Sands, and States (Tribes) Kings and Nobles**



The black lines are the lines connecting watch-posts and relay-stations. Grey letters and areas are mountains, while blue letters and areas represent rivers and lakes. The areas painted brown are sands. The red letters show the names of states, tribes and kings/nobles, and the underlined are the names of kings/nobles. The bracketed ‘spring’, ‘summer’ and ‘winter’ mean the seasons when the kings/nobles or tribes stay in that particular place. The bracketed ‘boundary’ indicates that these names of the state or tribe appear with the word ‘邊界’ *bianjie*, which means boundary. ‘U.’ is an abbreviation of Urianhai, a tribal name. These will be observed and discussed more in details in the next section.

## 2. Observation and Discussion

### (1) Area covered in *Kyouiki-zu*

This map is named *Kyouiki-zu*. *Kyouiki* means boundary, border, or frontier. Therefore, it may be said one feature of *Kyouiki-zu* is that it is a territorial map which shows boundaries. Based on this assumption, the following will observe the area covered in this map.

Table 1 is a list of mountains/hills, rivers, lakes and fortified cities, which are still easily identifiable today.

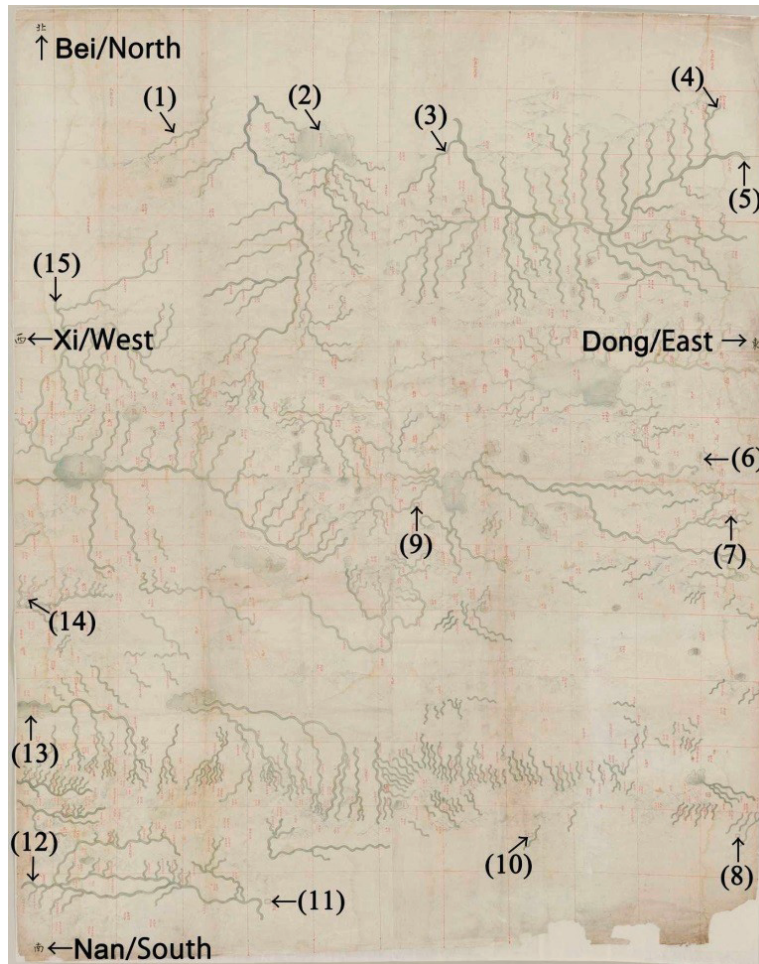
<sup>9</sup> Hereinafter, mountain passes will be included in mountains in this paper.

**Table 1: Place Names Covered in *Kyouiki-zu***

No.	<i>Kyouiki-zu</i>	Pinyin	Contemporary Name
(1)	色畢河	Sebi He	Obi River (?)
(2)	阿爾坦淖尔	Aertan Nuoyer	Teletskoe Lake
(3)	罕滕柯尔河	Hantengkeer He	Kantegir River
(4)	哈木薩喇柯木河	Hamusalakemu He	Kham-syra River
(5)	花柯木河	Huakemu He	Kaa-khem River
(6)	布色特哈拉淖尔	Busetehala Nuoyer	Bust Lake
(7)	烏里雅蘇台城	Wuliyasutai Cheng	Uliastai
(8)	哈密城	Hami Cheng	Hami
(9)	科布多城	Kebuduo Cheng	Hovd
(10)	關展城	Pizhan Cheng	Shanshan
(11)	喀喇沙爾城	Kalashaer Cheng	Yanqi
(12)	大朱尔曷斯河	Dazhuertusi He	Kaidu River
(13)	喀尔塔喇額西柯淖尔	Kaertalaexike Nuoyer	Ebi Lake
(14)	塔尔巴哈台城	Taerbahatai Cheng	Tarbagatai
(15)	額尔齊斯河	Eerqisi He	Irtys River

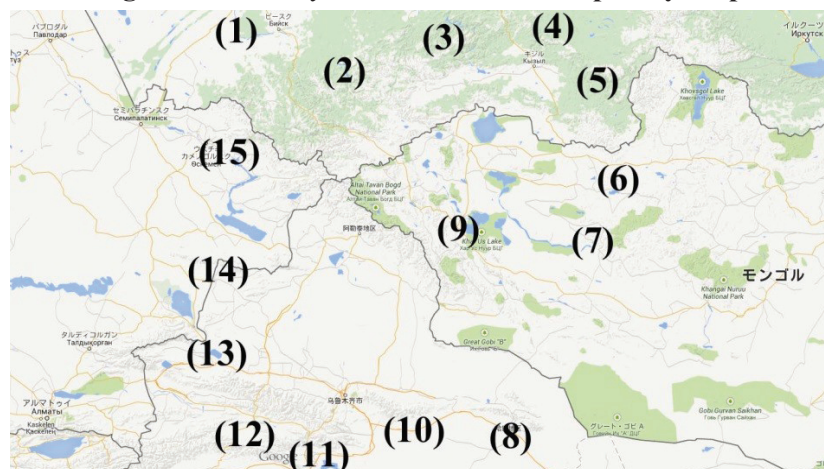
Fig. 2 shows the locations of these places on *Kyouiki-zu* by numbers. To make the directions clear, the locations of Chinese characters which indicate east, west, south, and north are also pointed out.

**Fig. 2: Area and Directions of *Kyouiki-zu***



The areas shown in Table 1 cover from Tannu Urianhai on the north, through Hovd and Dzungaria, the northern part of Xinjiang, to some territories of Zasagt Han Aimag and Sain Noyon Han Aimag of Halh. The Chinese name of the map literally means *The Frontier-Area Map of Hovd in Qianlong Era of Qing Dynasty*. To be precise, however, the map covers not only Hovd. This is probably a reason why Onuma called this 'the Map Centering around Qobdo'. Fig. 3 shows these locations on a contemporary map. The areas cover the north-western part of today's Mongolia, the northern part of Xinjiang Uyghur Autonomous Region, the eastern regions of Republic of Kazakhstan, Altai Republic, and Tyva Republic.

**Fig. 3: Areas of *Kyouiki-zu* on a Contemporary Map**



(Google Maps – numbers are added by the present authors)

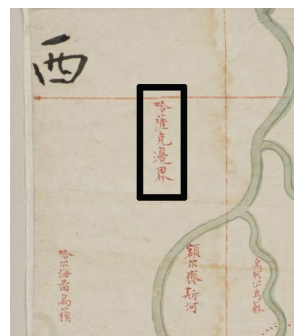
How are 'boundaries' drawn on this map, then? As Fig. 4 (a) and (b) below show, from the west of the map to the north, there are four '鄂羅斯邊界' *Eluosi bianjie* (Russian boundaries) and one '哈薩克邊界' *Hasake bianjie* (Kazakh boundary).

**Fig. 4: The Letters Showing Boundary**

**(a) Russian Boundary**



**(b) Kazakh Boundary**



It must be noted, however, that the map does not cover all 'boundaries' of the north-western and western parts of the Qing Dynasty. Hovd region is largely covered, yet the map does not describe the eastern end of Tannu Urianhai, the Western Ili region beyond Tarbagatai, and the areas beyond Yulduz River, which is located in the west of Kara Shahr, a fortified city on the traffic road connecting Hami, Turpan, Kuqa, and Kashgar. Below these, i.e. the bottom half of *Kyouiki-zu* no boundary is shown. In this map, there is a discrepancy in the ways boundaries are drawn between the north and south.

**(2) Directions of the Map and Letters**

As shown in Fig. 2, on the map we can see Chinese letters indicating directions: on the top-left margin, ‘北’ *bei* (north); on the upper-middle part of the left margin, ‘西’ *xi* (west); on the bottom-left margin, ‘南’ *nan* (south); and on the upper-middle part of the right margin, ‘東’ *dong* (east). They are all written in black Chinese ink. On this map, the top is north as it is usually the case in contemporary maps.

Apart from these four letters, most words are written vertically in red Chinese ink, i.e. from the north to the south, with only a small number of exceptions which are written horizontally, from left to right. In some Mongolian maps of the Qing era, the directions of writing may vary and the differences sometimes carry certain connotations (Inoue 2012: 226). However, in the case of *Kyouiki-zu*, most words are written vertically and the direction does not imply any particular meaning.

**(3) Layout**

As it can be seen in Fig. 2, the top and bottom margins are relatively large compared with the left and right margins. The photos below show some typical examples of the left and right ends, i.e. west and east ends, of the map.

Fig. 5 shows two examples of the left (west) end. We can see that both on (a) and (b) rivers and red dotted-lines are drawn to the very end of the paper. It looks as if the drawings continue to another piece of paper placed next to the map.

**Fig. 5: The Left (West) End of the Map**

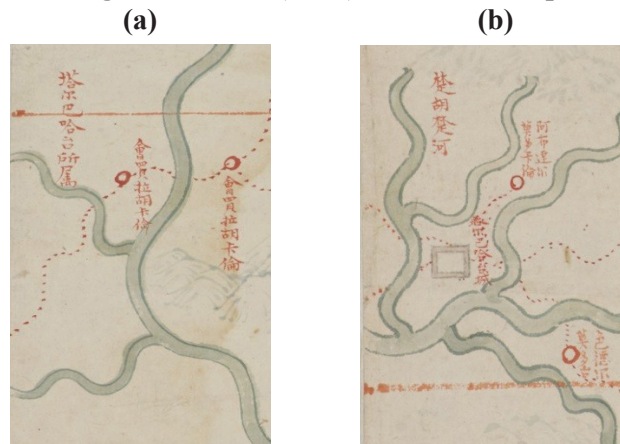
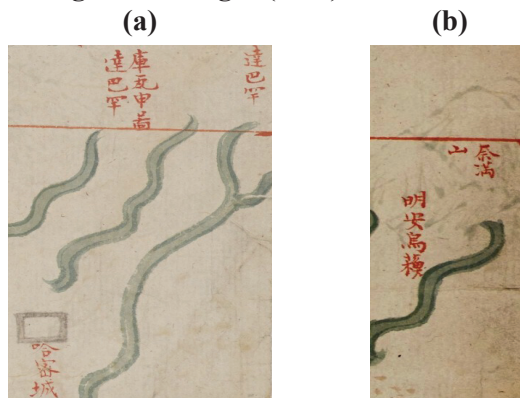


Fig. 6 shows the right end of the map. The picture (b) has been digitally processed by the present authors to make it clearer. On picture (a), rivers run to the very end of the paper, while on picture (b) the mountains are drawn to the edge. These features give the same impression as the left end discussed above.

**Fig. 6: The Right (East) End of the Map**

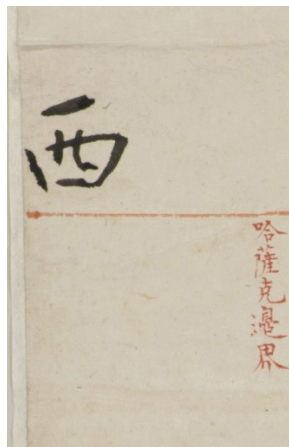


An attention should also be given to the ways in which ‘東’ *dong* (east) and ‘西’ *xi* (west) are written. As is clear from Fig. 7 (digitally processed by the present authors) and Fig. 8, they are written in narrow spaces at the very ends of the paper. ‘東’ *dong* (east) is written over the drawing of mountains.

**Fig. 7: ‘東’ *dong* (east)**

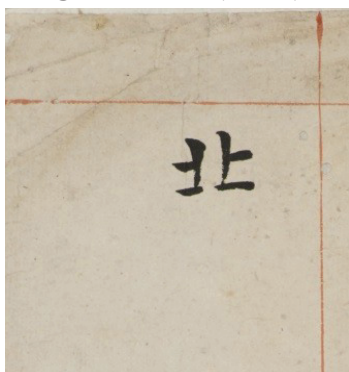


**Fig. 8: ‘西’ *xi* (west)**

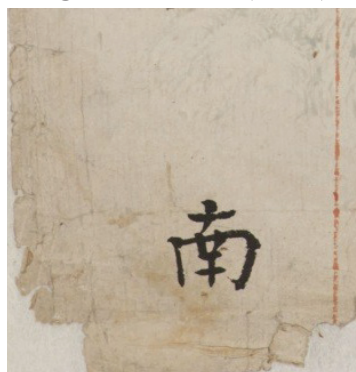


To the present authors’ knowledge, on many hand-drawn maps of the North-West China and Mongolia from the Qing era, directions are shown in the middle part of each side. However, in the case of *Kyouiki-zu* ‘北’ *bei* (north) and ‘南’ *nan* (south) are written on the top-left and the bottom-left, as shown in Fig. 9 and Fig. 10.

**Fig. 9: ‘北’ *bei* (north)**

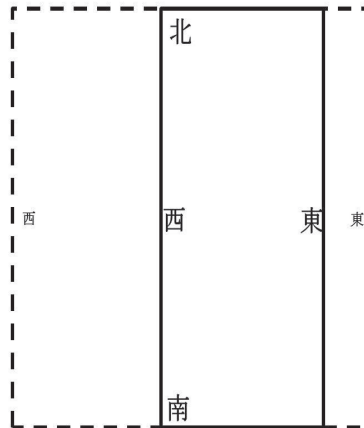


**Fig. 10: ‘南’ *nan* (south)**



Given the places of these two letters, the present authors consider that *Kyouiki-zu* is a part of an original map, which was horizontally larger, as shown in Fig. 11 (the solid line represents *Kyouiki-zu*, and the dotted line, original map). If ‘北’ *bei* (north) and ‘南’ *nan* (south) were in fact placed in the middle of the original map, the eastern part of the original map should not have been so large. Having said this, it must be noted that it is still a hypothesis, since in some maps objects are in fact drawn to the very end, using the paper to the fullest extent.

**Fig. 11: Possible Width of *Kyouiki-zu*, as Hypothesised from the Letters Showing Directions**



**(4) Drawings of Natural Objects**

Natural objects drawn in this map are mountains, rivers, lakes, and sands (sand dunes). These were briefly overviewed in Fig. 1. Rivers and lakes attract attention, as they are drawn in the bright colour. The names of these natural objects are generally written in red Chinese ink.

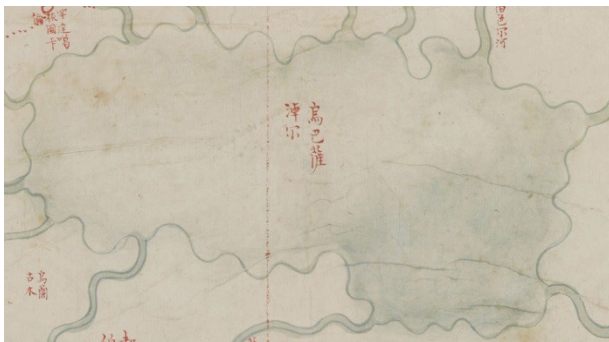
The following will look at basic drawing method and colouring of the natural objects.

**1) Lake**

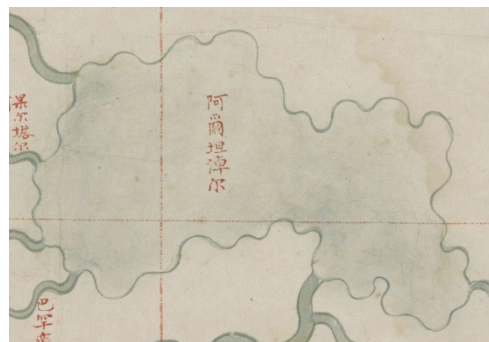
Fig. 12 shows ‘烏巴薩淖尔’ Wubasa Nuoyer (Uvs Lake) and ‘阿爾坦淖尔’ Aertan Nuoyer<sup>10</sup> (Teletskoe Lake) as examples of lakes. The colour may have been decayed with age, but the contours are drawn in dark blue-green paint, and the inside is filled with brighter blue-green paint. The contours are drawn from above, with wavy lines. The contours of some other objects are also drawn with wavy lines, thus this will be discussed again later.

**Fig. 12: Lakes in *Kyouiki-zu***

**(a) ‘烏巴薩淖尔’ Wubasa Nuoyer (Uvs Lake)**



**(b) ‘阿爾坦淖尔’ Aertan Nuoyer (Teletskoe Lake)**



When compared with contemporary maps (*Soviet Military Maps*), it is clear that the shapes of the lakes on *Kyouiki-zu* does not really match with the real shapes, as shown in Fig. 13. Yet if they are tilted, it appears that *Kyouiki-zu* seems to capture at least some features of the real lakes. As Onuma points out, *Kyouiki-zu* is not a surveyed map. It may be said that a feature of this map is that it captures some distinctive shapes of geographical objects.

<sup>10</sup> Class. Mo. altan nayur, Mo. Altan nuur



**Fig. 13: Uvs Lake and Teletskoe Lake in Contemporary Maps**  
**(a) Uvs Lake** **(b) Teletskoe Lake**



**2) River**

As for rivers, Fig. 14 shows ‘扎巴罕河’ Zhabahan He (Zavhan River) as an example. The river channel is shown in the light blue line. The drawing technique is same as that of lakes – the contours are drawn in dark blue-green, and the inside is painted in lighter blue-green. The contours are drawn from above, with continuous wavy lines.

**Fig. 14: ‘扎巴罕河’ Zhabahan He (Zavhan River)**



Fig. 15 is Zavhan River as appeared in *Soviet Military Maps*. The river channel is shown in the light blue line. When compared with this, it appears that the Zavhan River on *Kyouiki-zu* roughly represents the features of the real river channel, in terms of the direction and curves.

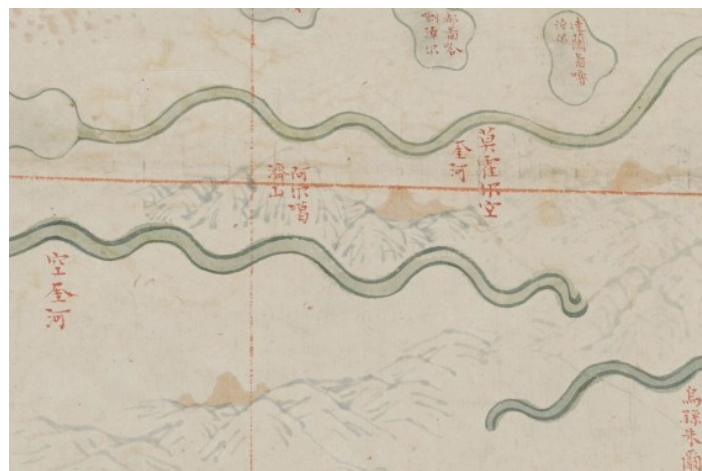
**Fig. 15: Zavhan River**



### 3) Mountain

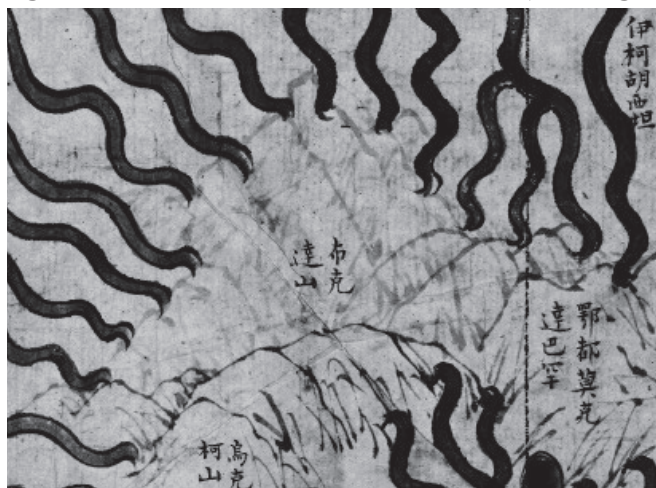
The most distinctive feature of the drawing of mountains is that they are drawn in very light blue, though there is a possibility that the colour may have been faded with age. The basic features of the drawing are as follows. The shapes of the mountains are drawn clearly from lateral view, all mountaintops directed toward north. Light and detailed ridge lines are drawn inside. The ranges of mountains and peaks are drawn in connection to each other – front and back, and left and right. This creates a sense of depth in the picture. As shown in Fig. 16, some mountains are shaped sharp and lofty, while others are smooth and gentle.

**Fig. 16: An Example of Mountain Depiction in *Kyouiki-zu***



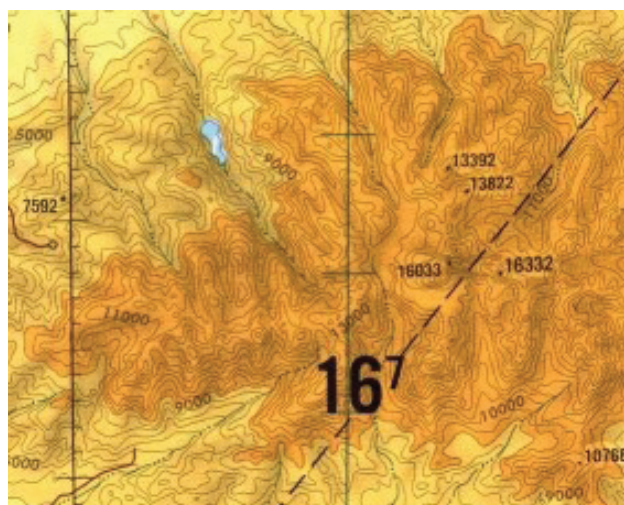
To what extent do these depictions of mountains reflect the real shapes? We would like to consider this by looking at an example, the area around '布克達山' Bogda Shan (Mt. Bogda) in the eastern part of Ürümqi, which is shown in Fig. 17. The colours are adjusted, in order to make it clearer to see.

**Fig. 17: Around ‘布克達山’ Bukeda Shan (Mt. Bogda)**



Mt. Bogda stands behind, and in front of it, i.e. in the south, there are mountains and ridges, ‘烏克柯山’ Wukeke Shan (Mt. Wukeke) and ‘鄂都莫克達巴罕’ Edumoke Dabahan (Edumoke Pass). Between these, rivers flow out. Bearing these in mind, let us now compare this with Fig. 18, a contemporary map (*Tactical Pilotage Charts*).

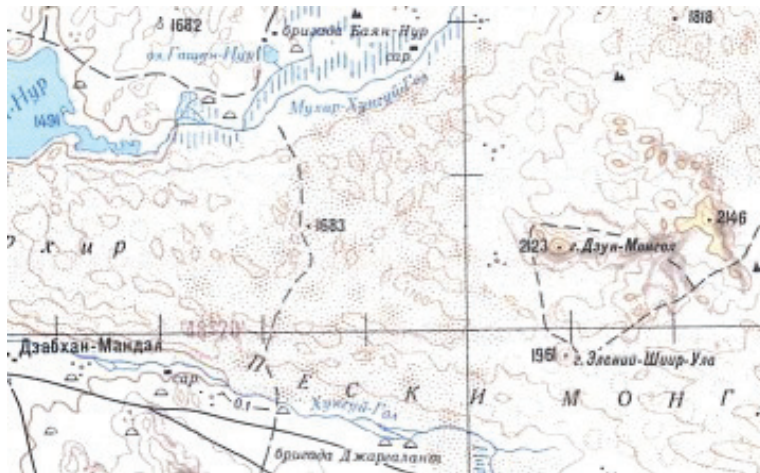
**Fig. 18: Area around Mt. Bogda**



In the centre-right of Fig. 18, there are two prominent peaks of 16,332 ft. and 16,033 ft. On the south there are mountain ridges of 10,000 ft. level, and between them flow out rivers. This geographical feature matches with the depiction of Mt. Bogda area in *Kyouiki-zu*, which describe this as seen from the south. Thus some depictions of the mountains in *Kyouiki-zu* do reflect the real terrain as seen in contemporary maps.

A closer look at Fig. 16 reveals that along with the drawing of mountains in light blue, there are also some mountain-shaped objects painted in light brown. These are not mere stains. When examined closely, these appear to be drawn carefully, not to spoil the ridge lines drawn in blue. The question then is whether these brown mountain-shapes have a particular meaning. There are three rivers on Fig. 16, and the northernmost is ‘莫霍尔空奎河’ Mohuoer Kongkui He (Muhar Hüngüi River), and the below it is ‘空奎河’ Kongkui He (Hüngüi River). If we compare Fig. 16 with Fig. 19 (*Soviet Military Maps*), with focus on the brown mountain-shapes located between these two rivers, the following can be observed.

**Fig. 19: Muhar Hüngüi River and Hüngüi River**



According to the map symbols, the areas between these two rivers are sands, and on the sands stand crests of 1,600-2,100 meters high. The scenery depicted in *Kyouiki-zu* by the combination of blue ridge lines and brown mountain shapes may be a representation of this geographical landscape found in Fig. 19, i.e. the mountains on the sands or mountains with the sands.

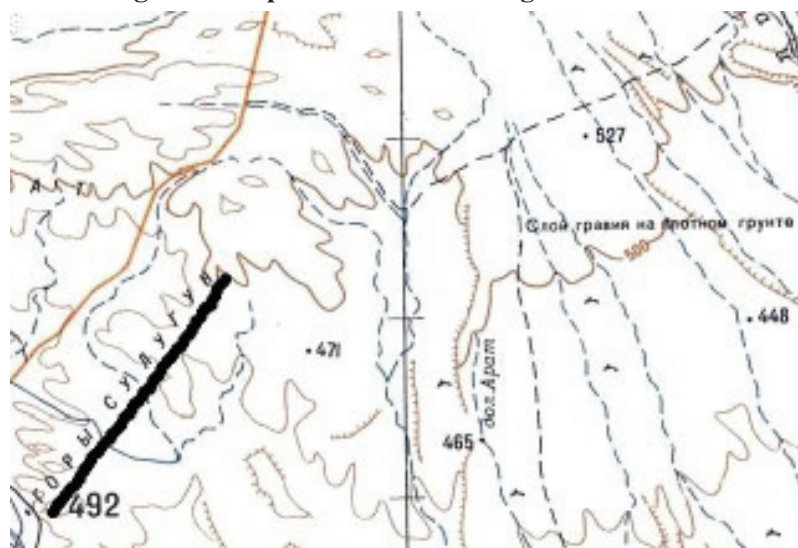
A small number of such brown mountain-shapes can be found in other parts of the map. However, there is only one place where mountain peak and ridge lines are drawn both in brown. The mountain peak found at the right end of ‘色爾柯山’ Seerke Shan (Mt. Seerke), located on the right bottom of Fig. 20 below, is drawn in brown. Is this just a mistake in drawing?

**Fig. 20: Brown Mountains in *Kyouiki-zu***



If we look at this area in Fig. 21 (*Soviet Military Maps*), there are several T-shaped symbols in the east of the underlined ‘GORY SULUGUN’ (Sulugun Mountains), i.e. ‘色爾柯山’ Seerke Shan (Mt. Seerke). This symbol means scarp, that is, steep slope and cliff which are created by faulting or erosion. This precipitous terrain may be Yardang terrain which is widely observed in this region. There is a possibility, therefore, that the brown mountain is a representation of steep cliff where bare soil is exposed. This also suggests that *Kyouiki-zu* was drawn taking into account the real terrain and geographical features.

**Fig. 21: Scarp in the East of Sulugun Mountains**



**4) Gobi and Sand Dune**

As observed above, brown colour is used for the objects related to earth, such as sand and soil. This feature is most apparent in the depiction of gobi and sand dune. Fig. 22 below shows them both.

On the upper part of the map (north), there is an annotation, ‘沙崗’ *shagang* (sand dune), and gentle hill-like shape is drawn by the mixture of brown and blue lines. This is a drawing from lateral perspective.

On the lower part (south), there is an annotation, ‘西尔哈戈壁’ *Xi'erha Gebi*,<sup>11</sup> and brown dots are observed. This is a drawing from above.

**Fig. 22: Gobi and Sand Dune in *Kyouiki-zu***

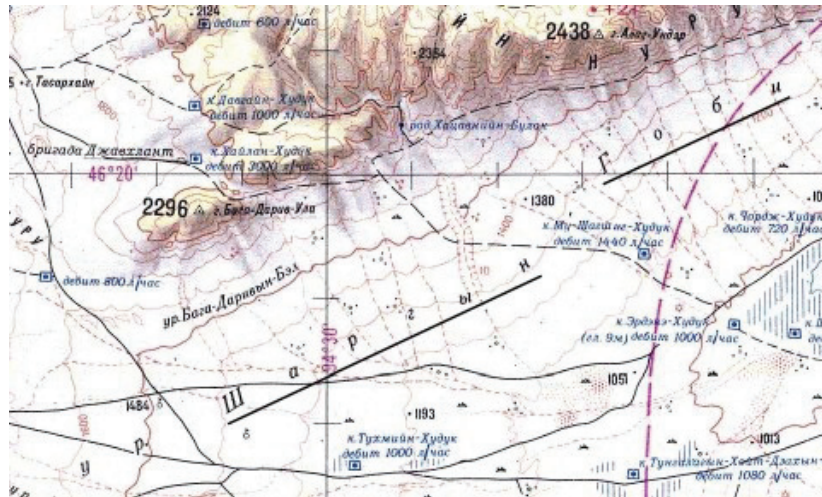


Let us look at these in Fig. 23, *Soviet Military Maps*. ‘西尔哈戈壁’ *Xi'erha Gebi* is probably Shargin Gobi (underlined). The map symbol indicates this area is the grasses with rocks scattered on the land surface, and this does match with the feature of gobi. Unfortunately this map does not

<sup>11</sup> Class. Mo. *siry\_a* (?) *yobi*

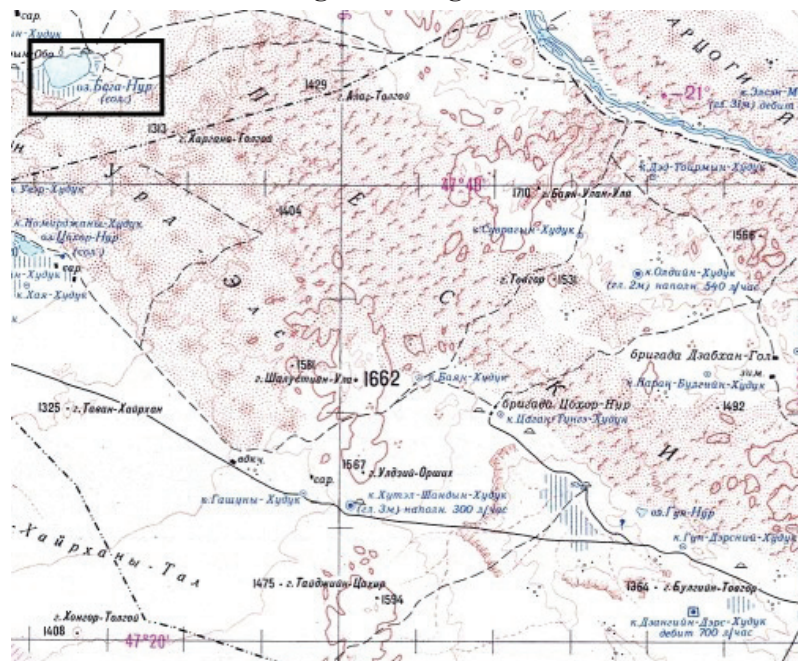
tell the area of Shargin Gobi and we are unable to determine the extent to which the depiction of ‘西尔哈戈壁’ Xi'erha Gebi in Fig. 22 correspond with the area of Shargin Gobi as defined in contemporary maps.

Fig. 23: Shargin Gobi



In Fig. 22, in the east of ‘巴罕淖尔’ Bahan Naoer<sup>12</sup> (Bahan Lake) ‘沙崗’ shagang (sand dune) is spread. This may be the sands called Mongol Els. The lake which is indicated by a black rectangle on the left-top of Fig. 24, *Soviet Military Maps*, is ‘Бага-Нур’<sup>13</sup> (Baga Lake), and it is ‘巴罕淖尔’ Bahan Naoer (Bahan Lake) in *Kyouiki-zu*. In the east of this lake, the symbols indicating sand dunes and barchans are widely observed, and we can see this is a dune area.

Fig. 24: Mongol Els



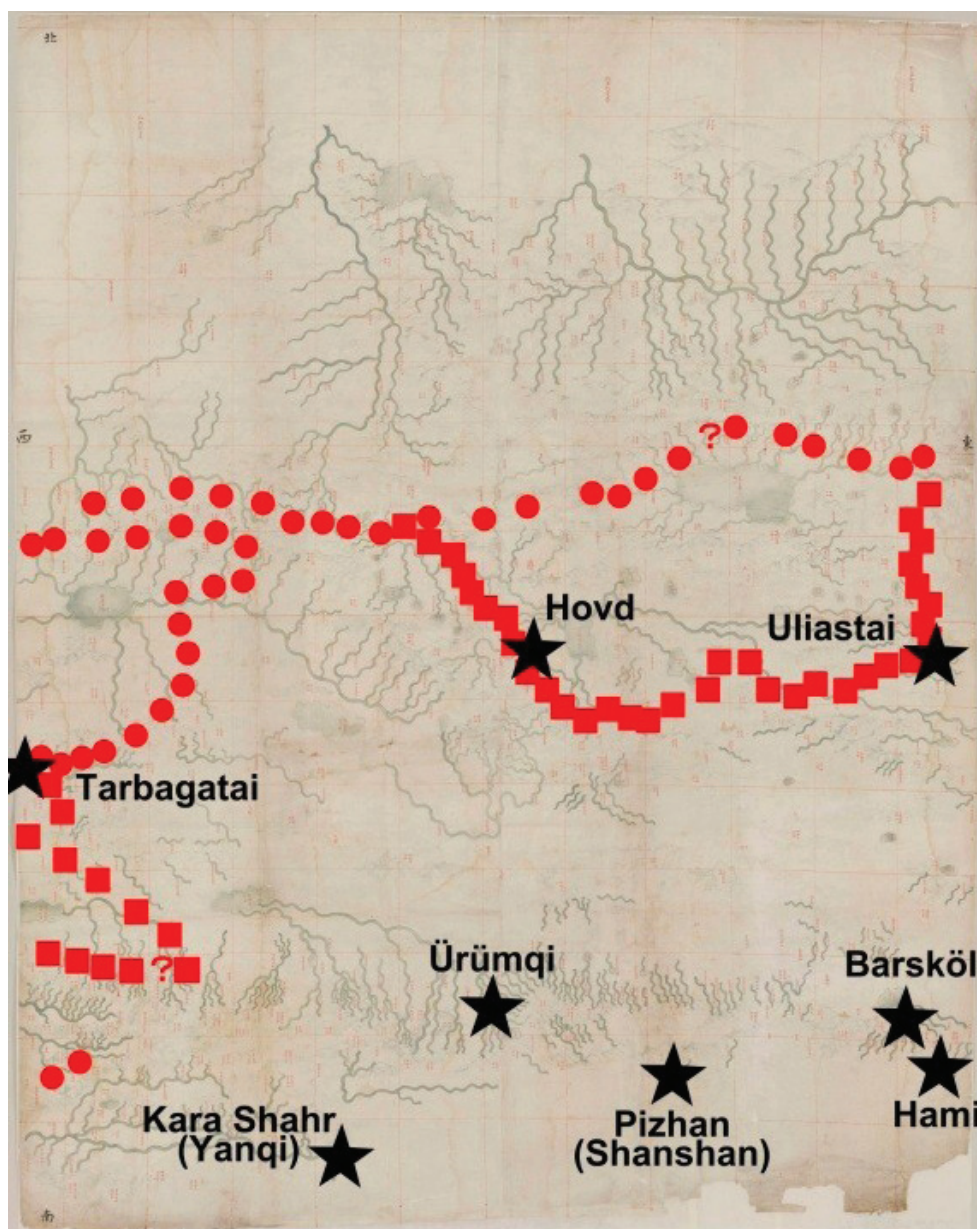
<sup>12</sup> Mo. бага нуур  
<sup>13</sup> Same as above.

Thus, in *Kyouiki-zu* the sands and predominantly gravel areas are shown in brown colour. Gobi and sand dune / barchan are distinguished. These can be considered to be another feature of *Kyouiki-zu*.

**(5) Depiction of Artificial Objects**

Artificial objects depicted in *Kyouiki-zu* include fortified cities (‘城’ cheng), relay-stations (‘台’ tai), and watch-posts (‘卡倫’ kalun<sup>14</sup>). On Fig. 25, fortified cities are marked with ★, relay-stations with red ■, and watch-posts with red ●. The red question marks mean they are either relay-station or watch-post yet cannot be determined. As was the case for natural objects, the names are written in red Chinese ink. The following will look at these depictions more in details.

**Fig. 25: Fortified Cities, Relay-Stations and Watch-Posts**

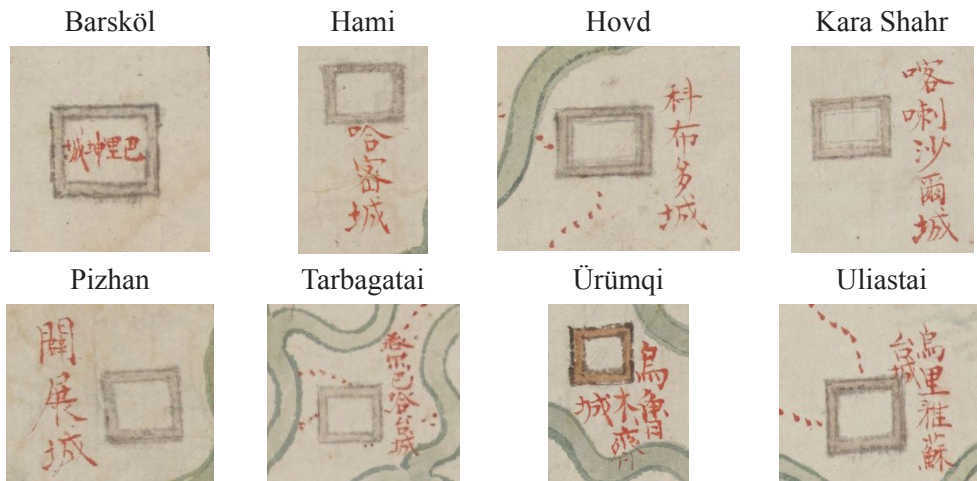


<sup>14</sup> Ma. karun

### 1) Fortified City

As already noted earlier, Onuma points out that fortified cities are indicated by double rectangles, and the castles of Ili region are not included (Onuma 2005: 96). There are eight fortified cities included in *Kyouiki-zu*. Let us see the drawing of the fortified cities below.

**Fig. 26: Fortified Cities**



The depth of colour varies, but in the case of Ürümqi, where the colour remains most strongly, it can be seen that a double square is drawn in black Chinese ink, and the gap between two squares is filled with brown paint. This double square is a depiction of castle walls surrounding the city, as seen from above. The unique features of each city are ignored and all cities are represented by the same abstract symbol.

### 2) Relay-Station and Watch-Post

Onuma points out that relay-stations and watch-posts are indicated by small black dots, and they are connected to each other by black dotted lines (Onuma 2005: 96). However, if we see Fig. 22 above, some small circles and dotted lines are drawn in red. This can be observed in other parts of the map, too.

The small circles indicating relay-stations and watch-posts do not represent the real shapes at all, and are mere symbols. The red dotted lines connecting relay-stations and watch-posts form curves quite regularly. Yet it is not very probable that the real roads ran in such a shape. In fact, this kind of shape can be observed in the depiction of lakes and rivers, as mentioned earlier. Therefore, this does not have any particular implication.

Onuma also points out, as seen earlier, that while the relay-stations of Hovd are included in the map, the relay-stations of Dzungaria are not depicted. This suggests, according to Onuma, that more emphasis is placed on Hovd than Dzungaria (Onuma 2005: 98). Dzungaria appears on the southern half of *Kyouiki-zu*, and Hovd is on the northern half. We have already seen that there is no boundary drawn on the southern half of this map. The feature pointed out by Onuma, therefore, is another characteristic found on the southern half of the map.

### (6) State, Tribe and King/Noble

As seen in Fig. 1, this map shows two states/tribes which share borders with the Qing Dynasty. One is Russia, and another is Kazakh. We can see, both in red colour, ‘鄂羅斯邊界’ *Eluosi bianjie* (Russian boundary) and ‘哈薩克邊界’ *Hasake bianjie* (Kazakh boundary). As for Russia, there are four boundaries found in the areas from the northern part of Sayan Mountains to Obi River, and in the north of Bukhtarma River, a tributary of Obi River. One Kazakh boundary is located in the west bank of Irtysh River, the north of Zaisan Lake. ‘邊界’ (boundary) is indicated only for Russia and



Kazakh, and in this sense they are treated differently from other tribes listed below.

Apart from Russia and Kazakh, these tribes are included in the map.

阿尔台淖尔烏哩洋海 Aertai Naoer Wuliyanghai (Altai-Nuur Urianghai)  
 阿尔台烏哩洋海 Aertai Wuliyanghai (Altai Urianghai)  
 唐努烏哩洋海 Tangnu Wuliyanghai (Tannu Urianghai)  
 都尔伯特 Douerbote (Dörvöd)  
 扎哈沁 Zhahaqin (Zahchin)  
 喀爾喀 Kaerka (Halh)

These are also written in red letters. In addition, the places of nomadic camp are indicated for some kings/nobles and tribes – in some cases distinguishing between summer and winter camps. They are written in red letters, too.

策伯克多尔游牧 Cebokedouer youmu (Tsevegдорж nomadizing)  
 班巴爾游牧 Banbaer youmu (Banbar nomadizing)  
 奢楞夏季游牧 Sheleng xiaji youmu (Sheren nomadizing in summer)  
 奢楞冬季游牧 Sheleng dongji youmu (Sheren nomadizing in winter)  
 阿拉克春季 Alake chunji (Alag nomadizing in spring)  
 霍碩特夏季游牧 Huoshuote xiaji youmu (Hoshuud nomadizing in summer)  
 霍碩特冬季游牧<sup>15</sup> Huoshuote dongji mumu (Hoshuud nomadizing in winter)

Onuma maintains that this kind of information is rarely found in the maps of the Qing era (Onuma 2005: 99). As far as the present authors have been able to confirm, tribe names and their pasture lands are also marked in such maps as ‘新疆圖說’<sup>16</sup> *Xinjiang tushuo* (*Illustrated Books of Xinjiang*), *Qinding Xinjiang shilüe*, ‘科布多中俄邊境建立界牌鄂博圖’ *Kebuduo Zhong-E bianjiang jianli jiepai ebo*<sup>17</sup>-*tu* (Map of *ovoos* in Hovd, which mark the border between China and Russia) (hereinafter referred to as *Ebo-tu*)<sup>18</sup>.

### 3. Comparison

This section will attempt to characterise *Kyouiki-zu* in comparison with other frontier-area maps of the Qing era, which depict Xinjiang and Hovd. The chief objective here is to see what are depicted in the well-known frontier-area maps in what ways, and to compare these with *Kyouiki-zu*.

‘欽定皇輿西域圖志’ *Qinding huangyu xiyu tuzhi* (*Records with Maps of the Western Regions of the Imperial Realm, Compiled and Published by Imperial Order*) is a map compiled in Qianlong Year 47 (1782). It is considered to be a material which comprehensively cover the situation of Xinjiang and the north-western region back then (Liao and Yu 2008: 76). ‘天山北路圖一’<sup>19</sup> *Tianshan beilu-tu yi* (*Map of Tianshan North Route, First*) covers Tarbagatai region, the west end of *Kyouiki-zu*'s coverage, and it depicts mountains, rivers, lakes, sands, fortified cities, and relay-stations. It also shows neighbouring regions, states, and tribes in letters.

‘塔爾巴哈台輿圖’ *Taerbahatai yutu* (*Map of Tarbagatai*)<sup>20</sup> in *Xinjiang tushuo* (*Illustrated Books of Xinjiang*) is a coloured hand-drawn map, like *Kyouiki-zu*. However, in this map the upper side is south. The objects described are mountains, rivers, lakes, sands, fortified cities, relay-stations, watch-posts, and some dotted lines connecting relay-stations. The mines, names of people,

<sup>15</sup> This is a misspelling of ‘游牧’ *youmu*.

<sup>16</sup> Li 2010: 69-81.

<sup>17</sup> Mo. *ovoo*

<sup>18</sup> Li (2010: 44-45). [http://www.npm.gov.tw/exh98/frontier/img\\_04.html](http://www.npm.gov.tw/exh98/frontier/img_04.html) [Accessed on 11 April, 2015]

<sup>19</sup> [http://archive.wul.waseda.ac.jp/kosho/ru05/ru05\\_00104/ru05\\_00104\\_0004/ru05\\_00104\\_0004\\_p0045.jpg](http://archive.wul.waseda.ac.jp/kosho/ru05/ru05_00104/ru05_00104_0004/ru05_00104_0004_p0045.jpg) [Accessed on 1 April, 2015]

<sup>20</sup> Li (2010: 75).

nomad tribes, and neighbouring tribes and regions are written in letters. Compared with *Kyouiki-zu*, the shapes of mountains are more picturesque and sensitively drawn. The artificial objects, watch-posts and relay-stations are shown not by mere small circle, but by simplified shape of house as seen from oblique perspective.

*Ebo-tu*, compiled in 1869, is also a coloured hand-drawn map. This map shows Hovd area, which occupies the left-top quarter of *Kyouiki-zu*. From the title, we know that the objective of *Ebo-tu* is to show the locations of *ovoos*, which were built to mark the border between Qing and Russia. The present authors are yet to acquire a clear copy of this map and our observation may have some deficiencies. But it appears that mountains, lakes, rivers, watch-posts, relay-stations, fortified cities, and *ovoos* are depicted on it. There are also symbols which may represent grasses, and black small circles which seem to mean springs. As for the drawing of mountains, the basic shape consists of horizontally arranged three pairs of large and small mountains (drawn in black Chinese ink) which are placed front and back to each other. The inside of the mountain shapes is painted blue, and some are painted red. In the case of *Xinjiang tushuo*, *Taerbahatai yutu*, and *Kyouiki-zu*, a mountain is drawn using a lot of lines, and by making layers of such mountains, sense of continuity and depth is created. In contrast to these, in *Ebo-tu* mountains are drawn in such a way that the locations of the peaks are easily identifiable. The drawing of lakes/reservoirs and rivers is similar to that of *Kyouiki-zu* – the curved shape is generally used. The frame is drawn in black line, and the inside is painted, probably in green. The watch-posts, which are indicated by red small circles in *Kyouiki-zu*, are represented by the shapes of tents as seen from oblique perspective. The relay-stations are represented by black small circles with some lines inside, which look like Mongolian *ger*. The fortified cities are shown by double rectangles, like *Kyouiki-zu*, but they are painted red or brown. The icons which indicate *ovoos* and grasses, and small black circle that seem to represent springs are found in this map, while these are not found in *Kyouiki-zu*. In *Ebo-tu*, there are many watch-posts but the icons representing them look all similar. This is also the case for relay-stations, fortified cities, *ovoos*, grasses (?), and springs (?). Each icon, therefore, is functioning as a symbol of one geographical object. The names are written in Chinese characters for almost all objects. Information shown in words includes: the names of neighbouring states and tribes, such as 俄國南界 *Eguo nanjie* (Russian southern boundary), 唐努烏梁海游牧界 *Tangnu Wulianghai youmu jie* (boundary of Tannu Urianhai’s nomadic locations), and 唐努烏梁海游牧 *Tangnu Wulianghai youmu* (Tannu Urianhai nomadizing); the residential and nomadic locations of tribes residing in the areas covered in the map, for example, 阿勒坦淖尔烏梁海東界 *Aletan naoer Wulianghai dongjie* (southern boundary of Altan-nuur Urianhai), 哈薩克居住 *Hasake juzhu* (Kazakh living), and 哈薩克過冬處 *Hasake guodong chu* (place of Kazakh wintering); and the residences of individual persons like 總管莽岱住牧處 *Zongguan Mangdai zhumu chu* (pastureland of Zongguan Mangdai).

Table 2 below is a summary of the iconic expressions on the maps, as seen above.

**Table 2: Comparison of the Objects (Icons) Appeared on the Maps**

	<i>Kyouiki-zu</i>	<i>Tuzhi</i>	<i>Tushuo</i>	<i>Ebo-tu</i>
1. mountain, pass	○	□	○	□
2. river	□	□	□	□
3. lake	□	□	□	□
4. gobi, dune, sand	□	□	□	---
5. fortified city	□	□	□	□
6. watch-post	□	*	○	○
7. relay-station	□	*	○	○
8. relay-station and watch-post road	□	*	*	---
<i>ovoo</i>	---	---	---	□
<i>ovoo</i> line	---	---	---	□

grass land (?)	---	---	---	□
spring	---	---	---	□
○: observed (pictorial sign) □: observed (abstract symbol) ---: not observed *: not observed in the part compared, but observed in different part				

It can be confirmed that these eight objects highlighted in grey are found in almost all maps, and the map which most comprehensively cover these eight objects, i.e. the most standard map, is *Kyouiki-zu*. Another feature of *Kyouiki-zu* as a map is that the icons are not very pictorial, and mostly abstract and symbolic thus not very distinctive.

Table 3 below is a summary of the text information appeared on the maps.

**Table 3: Comparison of the Texts Appeared on the Maps**

	<i>Kyouiki-zu</i>	<i>Tuzhi</i>	<i>Tushuo</i>	<i>Ebo-tu</i>
Neighbouring Regions, States and Tribes Outside the Map	○	○	○	○
Names of Persons Living in the Covered Areas	○	---	○	○
Nomadic Tribes in the Covered Areas	○	---	○	○

All maps indicate neighbouring regions, states and tribes beyond the main areas covered by the maps. Three maps, with an exception of *Tuzhi*, show the residential locations of kings/nobles and tribes found in the areas covered by the maps. There are some differences between *Kyouiki-zu* and *Ebo-tu* in terms of the coverage of kings/nobles and tribes. This is understandable given the fact that *Ebo-tu* covers only a quarter of the areas covered by *Kyouiki-zu*.

**Conclusion**

*Kyouiki-zu* covers the areas from Altai-nuur Urianhai and Tannu Urianhai in the north to Kara Shahr in the south, and from Tarbagatai in the west to Uliastai in the east. On the northern half of the map, up to around Zaisan Lake, the boundaries with Russia and Kazakh are shown. Yet on the southern half, since the western part beyond Tarbagatai is not covered, boundaries around this area are missing. Chinese letters showing directions are usually found in the middle of each side of the paper. However, in the case of *Kyouiki-zu*, *nan* (south) and *bei* (north) are found in the left end of the paper, and this is unusual. If we suppose that these *nan* (south) and *bei* (north) were in fact located in the middle part of the map, it may be considered that *Kyouiki-zu* as we see it today was a part of larger original map, which also covered the western areas beyond Tarbagatai, and that Egami acquired only this part of the map for one reason or another.

*Kyouiki-zu* covers standard items found in the maps of the north-western region of the Qing era. These items include: mountain and pass; river; lake; gobi, dune and sand; fortified city; watch-post; relay-station; and relay-station and watch-post road.

Some items appeared on the map reflect the real shapes of terrain to some extent, as we can see in contemporary topographical maps. They are not as precise as contemporary maps, but show geographical features with certain accuracy.

The icons are more simple and symbolic than pictorial, and in this sense do not look very distinctive. The uniqueness and character of a map is defined by iconographic expressions which focus on a specific theme, as it is the case in *Ebo-tu*, or unique depiction of geographical objects which reflects the personality and world view of the drawer. We do not know why Egami acquired this map for what purpose, and the overall theme of the map is not clear from the contents. Therefore, it is not possible to determine for what purpose this map was made.

*Kyouiki-zu* covers the areas from Altai(Altan)-nuur Urianhai and Tannu-Urianhai in the north to Kara Shahr in the south, and from Tarbagatai in the west to Uliastai in the east. Other maps we

examined, i.e. *Qinding huangyu xiyu tuzhi*, *Qinding xinjiang shilüe*, and *Xinjiang tushuo*, do not cover such a large area. In the case of huge map collections, such as *Qianlong neifu yutu* and ‘皇朝一統輿地全圖’ *Huangchao yitong yudi quantu* (*Complete Maps of Unified Geography of the (Qing) Dynasty*), too, the area covered by each sheet is not as large as the area covered in *Kyouiki-zu*. There may be not many maps on the north-western region of the Qing era, which cover such a huge area in a single sheet of paper.

Overall, *Kyouiki-zu* is a very standard frontier-area map of the Qing era. Although the description of the southern half seems inadequate, as a single paper hand-drawn map it has an advantage of covering large areas.

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### ТОВЧЛОЛ

Shindai Kenryuu-ki Kobudo Kyouiki-zu (Чингийн үеийн Ховд хязгаарийн зураг. Товч. Кёоики-зү) Токио их сургуулийн Эрдэм шинжилгээний ерөнхий музейд, Тагна Урианхайгаас Шинжхангийн Тэнгэр уулсын өвөр бэл, Улиастайгаас Тарвагатай хүртэл нэлээд өргөн хүрээ хэвчээтэй орон зайг зурж оруулсан нэг хязгаар газрын зураг хадгалагдаж байдаг. Үүнийг Манж Чингийн Тэнгэр тэтгэгчийн 30-аад оны 2-р хагасаас эхлэн мөн 42-43 онд бүтсэн юм хэмээн зарим эрдэмтэд үздэг. Угийн гарчиг нэр нь алга (Кёоики-зү нь хожимын нэрийдэл болно), албаны болон хадгалагчдын тамга байхгүй, зөвхөн Японы нэрт археологич Эгами Намио үүнийг хадгалж байсан нь тодорхой болохоос биш түүний гарал ирэлтэй холбогдох мэдээ занги ер байдаггүй. Уул ус, говь элсийг хөх (ногоон?), хүрэн будгаар будаж, өртөө харуулыг улаанаар зуран, тайлбар бүгдийг улаан бэхээр ханзаар бичсэн байна. Дөрвөн зүгийг заах ханз нь хар бэхээр бичигдэж байна. Кёоики-зү-гийн цаасанд Тарвагатайгаас баруунш нь багтсангүй учраас энэ газрын зургийн доор хагаст Илийн хязгаар газар нь зурагдаагүй. Өмнө хойныг заах ханз нь цаасныхаа баруун захад бичигдэж байгаагаас үзвэл энэ Кёоики-зү нь угтаа байсан Тарвагатайгаас баруунш газрыг зурсан хэсгийг орхисон юм бололтой. Кёоики-зүгийн зураг зүйн онцлогийг дүгнэвэл: Кёоики-зүд орсон газар зүйн зүйлс нь Манж Чингийн баруун хойд хязгаарыг зурсан газрын зургуудад түгээмэл харагддаг тул Кёоики-зү-г тухайн үеийн баруун хойд хязгаарын зургуудын стандартынх хэмээн үзэж болох; зураг тэмдгүүд нь тус газар дээрх газар зүйн бодит зүйлсийн дүрс байдлыг нэлээд сайн тусгаж байдаг; бэлэг тэмдгийн шинж хүчтэй тэмдгүүд ч олон харагддаг.