Materials Related to Mongolian Maps and Map Studies Kept at Prof. W. Kotwicz's Private Archive in Cracow

Abstract

Paper describes nine maps of Mongolia from Professor Władysław Kotwicz's Private Archive K III-19 at the Archive of Science of PAN and PAU in Cracow and materials related to them. In 1914 Kotwicz and Korostovets jointly published *Karta Mongolii* [Map of Mongolia] and *Kratkii obzor istorii i sovremennago politicheskago polojeniya Mongolii* [A Brief History and Current Political Situation of Mongolia]. The present paper demonstrates that the materials in the Archive were used for preparing these publications.

Keywords: Mongolia, maps, 1914, cartography, *oboγ-a*, W. Kotwicz, I. Ya. Korostovets

Introduction

In the present article I am going to examine and evaluate the scientific importance of the nine maps of Mongolia from Professor Władysław Kotwicz's Private Archive at the Archive of Science of PAN and PAU in Cracow and the related materials. In the previous publication, *In the Heart of Mongolia* (Tulisow et al. 2012), I selected three from among the nine hand-drawn maps kept in the Private Archive of Kotwicz. These three maps have been chosen because they include the monastery Erdene Zuu (Class. Mong. Erdeni juu). But in the Archive there have been preserved also other hand-drawn maps and some materials which seem relevant to these maps. In 1914 Kotwicz and Korostovets – who was a diplomat working in Mongolia – jointly published *Karta Mongolii* [Map of Mongolia] and *Kratkii obzor istorii i sovremennago politicheskago polojeniya Mongolii* [A Brief History and Current Political Situation of Mongolia] (Kotvich 1914). In the following I am going to demonstrate that the materials in the Archive are precisely those which were used when preparing *Karta Mongolii* and *Kratkii obzor istorii i sovremennago politicheskago polojeniya Mongolii* (hereafter referred to as *Kratkii obzor*).

1. Observations on Karta Mongolii

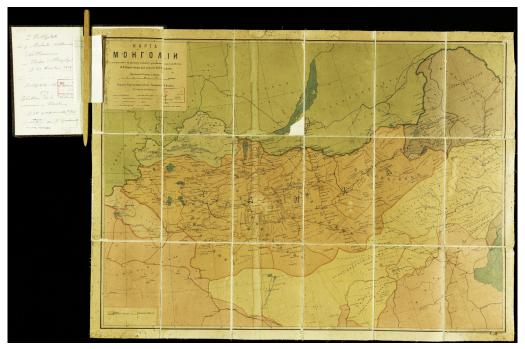


Figure 1: Karta Mongolii

Let us now take a closer look at this map to observe its specific features, i.e. (1) the areas included on it; (2) location of the borderline; (3) letters standing for the name 'Mongolia'; (4) meaning of the font size; and (5) drawing technique.

1-1. Areas included

Figure 2 shows the areas included on *Karta Mongolii* and the Roman transcription of Cyrillic letters found on *Karta Mongolii*.

In the center of the map there is Khalkha (Class. Mong. Qalq-a), and this area covers almost the same territory as today's Mongol Uls (Class. Mong. Mongγol ulus). The map covers regions from the northern part of Lake Baikal to the southern part of Alasha (Class. Mong. Alaša) League in today's Inner Mongolia Autonomous Region in China, vertically from north to south, and from the eastern part of today's Tongliao City to the border area between Altay Prefecture of today's Xinjiang Uyghur Autonomous Region and the Republic of Kazakhstan, horizontally from east to west.

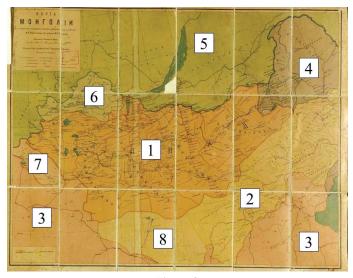


Figure 2

1-2. Location of the borderline

The next point to be ascertained is the location of the border. As we can see, the black thick line on the map is the borderline (Figure 3). It is not clear if there is a borderline towards the eastern part of the map because it overlaps with the Amur River. Borderline is drawn only in this place, and north of the border there is territory of the Russian Empire and to the south territory of China. This map therefore implies that there is no independent state called 'Mongolia'.

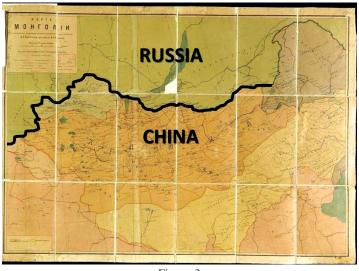


Figure 3

1-3. Place of the word 'Mongolia'

The main subject of this map is precisely Mongolia as it is written in big characters in the left top area of the map. In the left bottom section of the map there is an explanatory note in Russian which says: 'Outer Mongolia' and 'Inner Mongolia'. The existence of two 'Mongolias', Outer Mongolia and Inner Mongolia, means that there is no unified political entity called 'Mongolia' that would claim to have the exclusive right to govern its own territory and people. In fact, in the main part of the map the word 'Mongolia' does not appear.

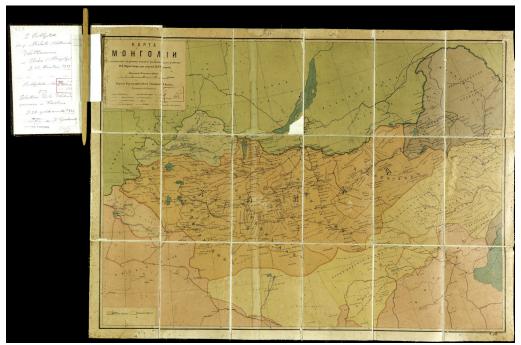


Figure 4-1



Figure 4-2

1-4. Font size and its meaning

The biggest characters in the main part on this map read 'Khalkha', which means Outer Mongolia. If we compare them with the characters standing for China we can clearly see how big they are. From this it is clear that although this is a map of Mongolia, the main object of description is Khalkha. Beside this, it should also be noted that there is no word meaning 'Russian Empire' on this map.

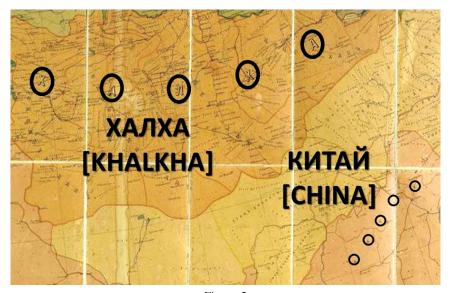


Figure 5

1-5. Elements of modern European cartography

Four cartographic features which were developed in modern Europe can be discerned on this map. These features include (i) distance and area determined by scale (Figure 6-1); (ii) position and direction determined by projection method (Figure 6-2); (iii) altitude determined by levelling; (iv) terrain shown by horizontal curves, terrestrial objects shown by scaled down representations of their real shapes or by symbols, and place names written in a literal text (Figure 6-2, 6-3, 6-4). On *Karta Mongolii* two elements of the last feature are missing, namely 'altitude' and 'terrain'. This is marked by horizontal curves such as contour. In general, however, this map clearly represents features of a modern European map.



Figure 6-1

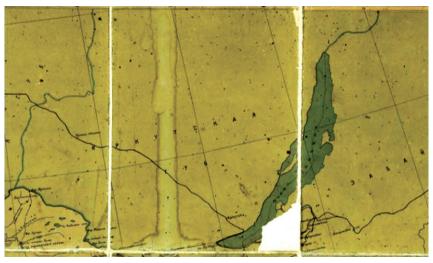


Figure 6-2



Figure 6-3



Figure 6-4

2. Kratkii obzor

Let us examine now the contents of *Kratkii obzor* which was published as a supplement to *Karta Mongolii*. It begins with a brief outline of Mongolian history from ancient times to 1911; it is followed by a short explanation on political history of the period of independence of Mongolia between 1911 and 1913. Following that, a concise account of the class structure, governing system, and social stratification of Outer Mongolia is provided, and this constitutes the main part of the book. This in turn is followed by a short overview of an introduction to Outer Mongolia, Inner Mongolia, Mongols of Alasha and Ezen gol, Mongols of [Eight] Banners, herdsmen of the Qing Emperor, and Mongols living among the different peoples of China.

It should be pointed out that the main feature of *Kratkii obzor* is the large space devoted to the description of Outer Mongolia. This feature is shared with *Karta Mongolii* which also in the main represents Khalkha or Outer Mongolia, as it was said earlier. Seven photographs are included in *Kratkii obzor*. From among them, the three photos in Figure 7 reproduced below can be found in the Kotwicz's Private Archive.







Figure 7
Photo 14435, 6356 and 6371 from the Kotwicz Archive, K III-19,
Archive of Science of PAN and PAU in Cracow

3. Nine hand-drawn maps kept in Kotwicz's Archive

Let us now examine the correspondence between the nine hand-drawn maps kept in the Archive and *Karta Mongolii*. The maps of two *aimays*, i.e territories of Dörvöd (Class. Mong. Dörbed) and Khovd (Class. Mong. Qobdu) frontier, are yet to be found in the holdings of the Archive. However, apart from these maps of the western region, all other maps are preserved in the Archive.

It is not possible to present here full cartographic examination of all these maps within the limited space available. For the purpose of this paper it would suffice to point out some features which confirm that these maps are reproductions, rather than original copies. Now, I am going to demonstrate that all these maps are located within the area covered by *Karta Mongolii*.

3-1. Map I: "Map of the twenty banners of the ayimaγ of Tüsiyetü Qan"

Call No.: K III-19, 144, 9 Size: 151.5 × 75.5 cm

Title on the map: tüsiyetü qan ayimaγ-un qorin jasaγ qosiγun-u nutuγ-un jiruγ.

As it is clear from the very title, this is a map of the $ayima\gamma$, i.e. province, of Tüsiyetü Qan. The features of this map have already been analyzed by the present author in Inoue 2012: 212–219.

The map was made in 1913. It is drawn in black Indian ink with a brush as well as with coloured pencils. It does not carry a red seal which is necessary for identification of a map as the original copy of an old Mongolian map. A red seal should be attached by an administrative section related to the area covered by a map. Since there is no red seal we may conclude that Map I is not an original copy but only a reproduction.



Figure 8

¹ Map II, Map III, and Map IV were discussed in detail in another paper, viz. Inoue 2012: 212–226. In the present article new call numbers of the maps are given.

3-2. Map II: Map of the Kölön Buyir (Man. Hulun buir) region with Manchu names

Call No.: K III-19, 144, 5

Size: 100×150 cm

There is no title written on this map but in the left top section there is an explanation in Manchu about the area which the map covers. The first passage of this explanation is as follows:

hulun buir harangga kadalara ba hetu ici emu minggan dehi funcere ba. undu ici uyun tanggû ninju funcere ba ("The province Kölön Buyir – [extends] across over 1040 miles, longways over 960 miles").²

Thus, we know that the map depicts the province of Kölön Buyir, which is located to the east of Outer Mongolia. Also in the left top, left bottom and right bottom areas there are inscriptions written in Mongolian:

egün ni tüsiyetü qan ayimaγ-un saγuji dayičin beyise-yin qosiγun-u γadaγaduyin yamun-u surγaγuli-yin köbegün lungdung jirulčaγsan jiruγ ("Map drawn by Lungdung from the School of Foreign Affairs Ministry of the banner of Dayičing Beyise in the ayimaγ of Tüsiyetü Qan");

tüsiyetü qan ayimaγ-un bišireltü güng so -yin qosiγun-u sonomdarji-a jirulčaba ("Co-drawn by Sonomdarji-a of the banner of Bišireltü Güng So of the ayimaγ of Tüsiyetü Qan");

egün-ni dayičin beyise-yin qosiγun-u lungdung jirulčabai ("This was co-drawn Lungdung of the banner of Dayičin Beyise").

These notes indicate that this map was drawn by two people, Lüngdüng of the *ayimaγ* of Tüsiyetü Qan, and Sonomdarji-a.

The year of map making is unknown. The objects described on the map include mountains, rivers, lakes and ponds, railroads, roads, temples and shrines, administrative authorities, guard-posts, $obo\gamma$ -a (hillocks, offering cairns), and settlements. Explanatory notes, for example about place names, are written in Manchu.

The map is drawn in black Indian ink with a brush as well as with colour pencils. This is a shared feature with Map I, and also this map does not carry a red seal. Therefore Map II may also be considered a reproduction of the original copy.

² I have cited A. Bareja-Starzynska's English translation of J. Tulisow's Polish rendering.



Figure 9

3-3. Map III: "[Map of] the ayimay of Tüsiyetü Qan"

Call No.: K III-19, 144, 8 Size: 111.3 × 76 cm

Title on the map: Tushetukhanskii aimak

As shown by the title, this is a map of $ayima\gamma$ of Tusiyetü Khan. A detailed analysis was given in Inoue 2012: 219–220.

The composition of this map suggests that it is a reproduction of Map IV introduced below or its original copy. Another feature which suggests that it is a reproduction is that everything is drawn in pencil, except for the borderlines, numbers, and name Urga (Class. Mong. Örgüge. i.e. today's Ulaanbaatar) which are drawn in black Indian ink, rivers which are drawn in blue pencil, and relay station roads and relay stations which are drawn in green pencil. Explanatory notes are also written in pencil, in Russian. And there is no red seal.

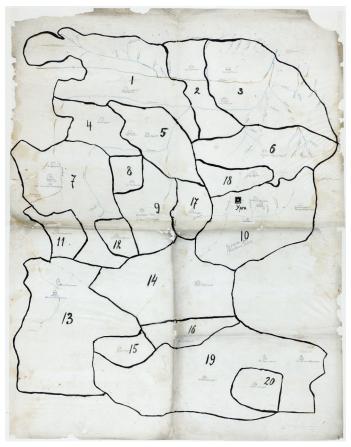


Figure 10

3-4. Map IV: "[Called] in short a big map of the banners of the *ayimaγ* [of Tüsiyetü Qan] of the tenth year of Sayisiyaltu Irügeltü [Jiaqing = 1805]. [It is] the draft of the map presented to the governors and officials of Küriy-e"

Call No.: K III-19, 144, 10

Size: 100.5×76 cm

Title on the map: sayisiyaltu irügeltü-yin arbaduγar on ayimaγ-un qosiγud-yin nutuγ-un tobčilajab-a(?) yeke jiruγ-i jangjun ambas küriyen-ü sayid tan-a ergügsen jiruγ-un eki

This is a map of the $ayima\gamma$ of Tusiyetü Qan. A detailed analysis can also be found in Inoue 2012: 221–226.

According to the title, this map was drawn in 1805. Yet, since clear traces of pencil drawing can be found in many parts, it may be considered a reproduction of a map originally produced in 1805.

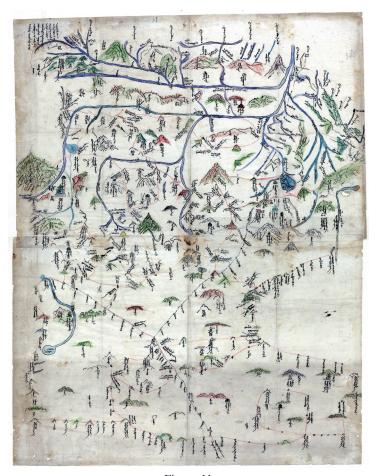


Figure 11

3-5. Map V: "[Map of] the *ayimaγ* of Sayin noyan Qan. [Drawn on] the 18th of December, 1912. Urga"

Call No.: K III-19, 144, 6 Size: 83 × 100.5 cm

Title on the map: Sain noinovskii aimak. 1912 g. 18 dekabr'. Urga

From the title, which is written in Russian, we know that this is a map of the $ayima\gamma$ of Sayin noyan Qan, which was drawn in Urga on the 18^{th} of December 1912.

Mountains, rivers, lakes and ponds, temples and shrines, administrative authorities, $obo\gamma$ -a, and settlements are drawn mostly in black pencil, and relay stations and relay station roads, as well as some temples and shrines and borderlines, are drawn in red pencil. Apart from red no other colour is used. The explanatory notes for place-names etc. are written mostly in black pencil either in Mongolian or in Russian, except for some explanations which are written in black Indian ink in Mongolian. Red seal is not affixed.

The title itself is written in Russian, and since most drawings and explanatory notes are in pencil and there is no red seal, this map too may be considered a reproduction.



Figure 12

3-6. Map VI: "Map of the ayimay of Jasaytu Qan [drawn by] Jamtsarano"

Call No.: K III-19, 144, 3

Size: (1) 75.5×48.5 cm; (2) 75.5×50.5 cm; (3) 73.4×50.0 cm; (4) 75.3×50.6 cm Title on the map (written on the back): *Karta Zasaktu khanovskii aimak. Jamtsarano* There is no title on the front of this map. The above title is written on the back of the map in red pencil. From this notice we know that this is a map of the *ayimay* of Jasaytu Qan, drawn by Jamtsarano.

This map appears quite colourful, being drawn in black Indian ink and black pencil as well as red, blue, green, yellow and brown pencils. The outline of mountains, rivers, lakes and ponds, and $obo\gamma$ -a are drawn in black Indian ink and then coloured. Borderlines are drawn in red pencil. Constructions such as administrative centers, temples and shrines, and settlements are not found on this map. Approximately half of the explanatory notes are in black Indian ink in Mongolian and another half in black pencil in Russian. There is no red seal affixed to this map. Taking into consideration all its features it may be concluded that this map is a reproduction made by Jamtsarano.

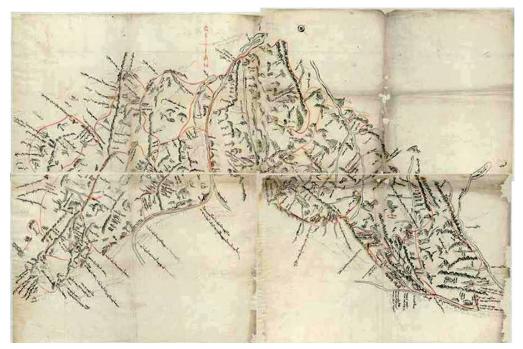


Figure 13

3-7. Map VII: "Map of Qara darqad, subjects of the Jibčundamba. The eighth day of the fourth month of the thirty-third year of Badarayultu törü [Guangxu = 1907]"

Call No.: K III-19, 144, 2

Size: 51×44 cm

Title on the map: jibčundamba qutuγtu-yin šabi qara darqad narun nutuγ-un jiruγ. badaraγultu törü-yin γučin γurbaduγar on dörben sarayin sineyin naiman

According to the Mongolian title this map was produced in 1907. Yet, from the Russian text inscribed in black ink pen below the Mongolian title we know that this is a reproduction made in November 1912.

This map is drawn in black and red pencil and black ink pen only, and no Indian ink is used. Most of the mountains, rivers, lakes and ponds, and $obo\gamma$ -a are drawn in black pencil, whereas borderlines are marked in red pencil, and one temple and the shape of only a small portion of mountains are drawn in black ink. Explanatory notes are in black ink pen in Mongolian, and on the top of the map, i.e. 'north', there is a word 'Nord' written down in black ink pen. The place-names are written in boxes which are drawn in black pencil. These text boxes may be representations of the place-name labels which are commonly attached to old Mongolian maps. No red seal is affixed. Judging from these features, this map may also be considered a reproduction.

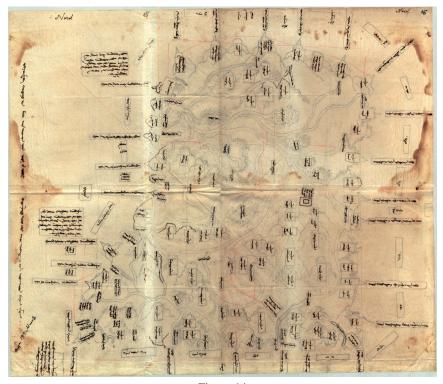


Figure 14

3-8. Map VIII: "Map of the twenty-three banners of the ayimay of Sečen Qan"

Call No.: K III-19, 144, 7

Size: 99×76 cm

Title on the map: Sečen qan ayimaγ-un qorin γurban j̃asaγ qosiγun-u nutuγ-un j̃iruγ Two sheets of very thin Chinese paper are pasted together, and the twenty-three banners of the ayimaγ of Sečen Qan are drawn in black Indian ink, black pencil and blue pencil.

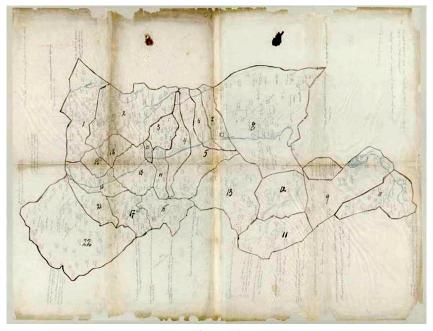


Figure 15

In the right top area, there is a pencil inscription, badarayultu törü-yin arban naimaduyar on qaburun segül sarayin sinein [= sine-yin] yisün ('the 18th year of Guanxu, the last month of the spring [= 3rd month], the ninth day'), and to the right of this, there is an inscription, also in pencil, mongyol-un olan-a ergügdegsen-ü qoyaduyar on. egün-i oros-un 1912 on. noyabri sarayin 27-a bayulyağu abuysan anu čeveng ğamsaranob ('the 2nd year of Olan-a ergügdegsen of Mongolia. On the 27th day of the month of Noyabri [= November] of the year 1912 of Russia, copied by Tseveng Jamtsaranov'). From these passages we know that this map was produced on the ninth day of the last month of spring in the eighteenth year of Guanxu, and reproduced by Jamtsarano in the second year of Olan-a ergügdegsen, or 27 November, 1912 according to the Russian calendar. In the right top section of the back of the sheet, there is an inscription, 'Jamtsarano', in red pencil in Cyrillic letters.

Such objects as mountains, rivers, lakes and ponds, temples, borderlines, relay stations and relay station roads are drawn on the map. The objects drawn in black Indian ink

are the borderlines and numbers from 1 to 23 for the twenty-three banners. While some rivers and lakes are drawn in blue pencil, most mountains, rivers, lakes and ponds, and temples are drawn in black pencil. The place-names are mostly written in light black pencil in Mongolian, but some are written in Russian and some Russian notes for place-names are written in blue pencil. There is no red seal. These features also indicate that this map is a reproduction.

3-9. Map IX: A map of the north-eastern part of the *ayimaγ* of Jasaγtu Qan, obtained by the Russian Consulate in Uliyasutai

Call No.: K III-19, 144, 4 Size: 69.8×44.8 cm Title on the map: None

Unlike other maps, there is no trace of pencil drawing on this map, and it is drawn in black Indian ink and red and blue paint. All explanatory notes are also written in black Indian ink in Mongolian. There are seven labels attached to the map, and texts written on these labels are also in black Indian ink in Mongolian.

Two Russian passages can be found on the map. In the left top section there is a Russian passage written in black ink pen. Below the passage a violet coloured seal is found and the Russian text on this seal reads – "Consular Office of the Russian Empire in Ulyastai" (Class. Mong. Uliyasutai). From these Russian notes it is clear that this map was delivered from the Consular Office of the Russian Empire in Ulyastai to Kotwicz.

This is a very well-drawn map. However, since there is no red seal, this is not an original copy, either and may be considered a well-produced reproduction.

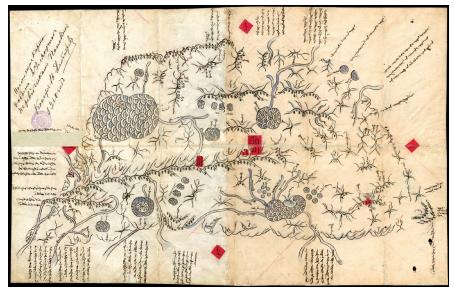


Figure 16

3-10. Correspondence of the old maps with Karta Mongolii

What is the relationship between these nine old maps and *Karta Mongolii*? Figure 17 below shows the areas covered by Maps I to IX on *Karta Mongolii*.

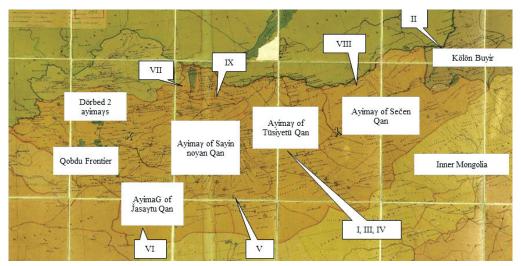


Figure 17

As can be seen from the picture, the areas covered by the nine old maps held in the Kotwicz's Private Archive correspond with today's area of Mongolia – in the terms used on *Karta Mongolii*, Khalkha or Outer Mongolia – except for the west end regions of two *aimags* of Dörvöd and Khovd Frontier. The covered area also includes the Kölön Buyir region which now forms part of the Inner Mongolia Autonomous Region in China. The areas covered by the nine maps are therefore narrower compared to the whole territory included on *Karta Mongolii*, but this in turn means that the regions represented by these nine old maps are covered completely by *Karta Mongolii*.

4. Map-related materials kept in Kotwicz's Private Archive (K III-19, 145)

The archive also holds some materials which are related to these maps. They are:

- List of the maps (collected by Kotwicz);
- Lists of oboγ-as;
- Mongolian and Russian lists of names of khoshuu (Class. Mong. qosiγun);
- Rules of reviewing Mongolian administration.
 In what follows, these four points will be discussed in relation particularly to *Karta Mongolii* and the nine hand-drawn maps.

4-1. List of the maps: correspondence of the list with maps

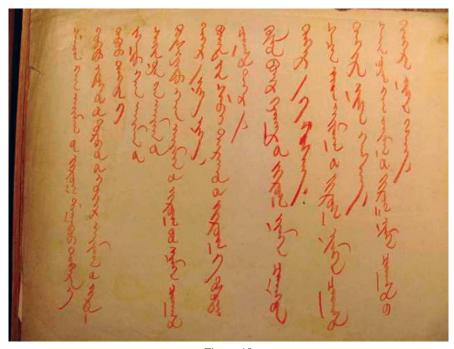


Figure 18

The list of maps is written in red pencil on a sheet of European paper, which appears to be precisely a Russian paper. Since there is no title of the list, first it should be determined what it represents. The content of the list is shown below. Marks A–G and numbers (1)–(3) are added by the present author.

- A. Map of Sečen Qan ayimaγ. On cloth. 1.
- B. Map of two aimags of Dörbed and of Qobdu frontier. On cloth. 1.
- C. Maps (1) of Jasaγtu Qan ayimaγ, (2) of Sain noyon Qan ayimag, (3) of Tüsiyetü Qan ayimaγ. On thin paper. 1 each.
- D. Map of Darqad, šabi of Boγda (= Jebčundamba Qutuγtu). On oiled paper (text: tosutai čaγasun).
- E. Map of Kölön Buyir frontier. On thin paper. 1.
- F. Map of Sečen Qan aimag. On thin paper. 1.
- G. Map of Sayin noyan Qan ayimaγ. On thin paper. 1.

As can be gathered from the above list, information in red pencil is about maps and it specifies covered areas, materials on which maps are reproduced, e.g. paper or cloth, and number of sheets. The table below shows the correspondence between this list and the maps kept in the archive.

List	Maps	List	Maps
A			Ι
В		C (3)	III
C (1)	VI		IV
C (2)	V	D	VII
G		Е	II
		F	VIII

Figure 19

Maps A and B on the list are not found in the holdings of the Archive. Yet, apart from these two, all others are kept in the Archive. Therefore, this list is probably the list of maps collected by Kotwicz or the list of maps delivered to him. It is possible that the maps which are on the list but actually are missing in the Archive may be kept somewhere else.

Below is presented a projection which demonstrates that all maps mentioned in the list actually cover the territory presented on *Karta Mongolii*.

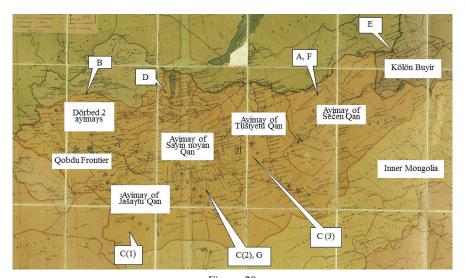


Figure 20

4-2. Lists of oboγ-as

In the period of the Qing Dynasty $obo\gamma$ -a marked the border between Mongolian nobles' lands. On Mongolian old maps of the Qing Dynasty era the boundaries are drawn in accordance with a boundary report (Class. Mong. $nutu\gamma$ -un cese), which records the

locations of borders ($obo\gamma$ -as) in detail (Gonchigdorzh 1970-1: 56–61; Shagdarsüren 2003: 19–27; Futaki and Kamimura 2005: 27–59). That is to say, the maps and the data of boundary report are coordinated.

There are two types of $obo\gamma$ -a lists held in the Archive of Kotwicz. One is what may be called ' $obo\gamma$ -a list between $aima\gamma s$ ', and this shows the names of $obo\gamma$ -as which constituted the border between the land of Tüsiyetü Qan $ayima\gamma$ and the land of Sayin noyan Qan $ayima\gamma$ (4-2-1). Another is what may be called ' $obo\gamma$ -a list between $qosi\gamma us$, i.e. banners', and this is a list of the names of $obo\gamma$ -as which form the boundary between two banners within the $ayima\gamma$ of Sečen Qan (4-2-2).

As it was shown earlier, Kotwicz collected maps which covered territories of these two $ayima\gamma s$, and one can surmise that he compiled the lists of $obo\gamma$ -as in relation to the maps. It goes without saying that the lines connecting these $obo\gamma$ -as form borderlines. It may be considered that these lists served as necessary information for drawing borderlines on $Karta\ Mongolii$.

4-2-1. List of *oboγ-as* between the *ayimaγ* of Tüsiyetü Qan and the *ayimaγ* of Sayin noyan Qan

Title: tüsiyetü qan [inserted: sayin noyan qan] qoyar ayimaγ-un qorin jasaγ qosiγun-u nutuγ-un jiq-a-yin obuγ-a ner-e-yi seyiregülün bičigsen debter ("List of oboγ-as located on the border of Tüsiyetü Qan ayimaγ and Sayin noyan Qan ayimaγ").

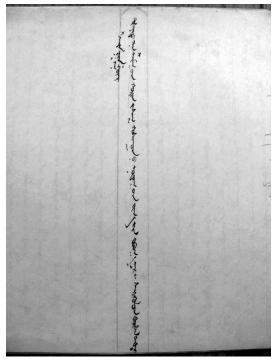


Figure 21

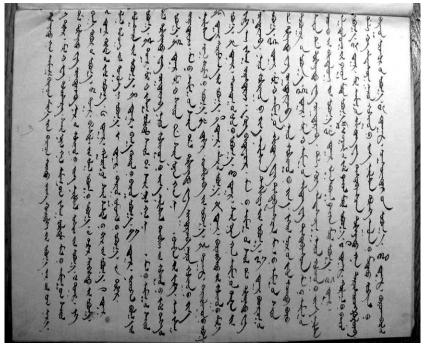


Figure 22

Figure 21 forms the cover page, and Figure 22 is the first page of the list.

4-2-2. List of oboγ-as between two banners of the ayimaγ of Sečen Qan

Title: sečen qan ayimaγ-un darqan güng barayidsari-yin qosiγun-u baraγun jiq-a-yin bayiča qada-yin oboγ-a-ača ekilen ačitu beyise sangsarayidorji-yin qosiγun-u jegün qoyitu jiq-a-yin šaričin-i origil-yin oboγ-a kürteleki-yin oboγ-a neres ("List of names of oboγ-as from bayiča qada-yin oboγ-a on the western border of banner of darqan güng barayidsari of sečen qan ayimaγ to šaričin-i origil-yin oboγ-a on the north-eastern border of banner of ačitu beyise sangsarayidorji").

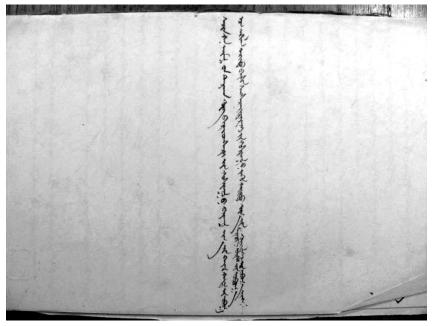


Figure 23

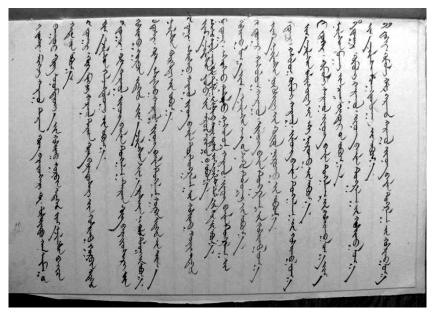


Figure 24

Figure 23 is the cover page, and Figure 24 is the first page of the list.

4-3. Mongolian and Russian lists of names of banners

In Kotwicz's Archive there are four lists written in Mongolian and Russian which show the names of nobles who governed banners as well as where they lived. Considering the features of the Mongolian and Russian lists described below, it seems that Mongolian names match *Karta Mongolii* better, whereas Russian ones correspond well to the above mentioned maps kept in the Kotwicz's Archive.

4-3-1. Mongolian lists

Mongolian lists are written in black Indian ink with a brush on ruled European paper. Figure 25 shows the names of twenty-two nobles who governed banners of Sečen Qan *ayimaγ*, and Figure 26 shows twenty names of nobles of Tüsiyetü Qan *ayimaγ*. If we compare the names on Figure 25 and *Karta Mongolii*, they basically correspond to each other with only one exception. As for Figure 26, we cannot be sure of two names but the rest are in correspondence. Therefore, these lists, too, probably have been compiled in relation to the maps.

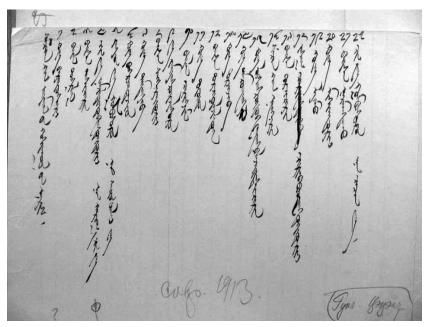


Figure 25

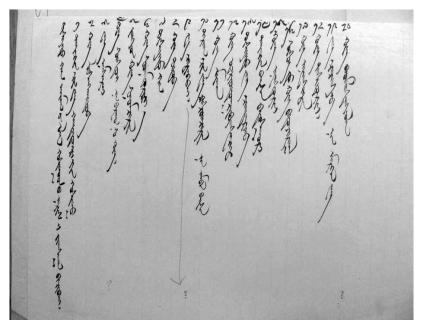


Figure 26

4-3-2. Russian lists

Lists in Russian are also similar. They are written in black pencil on European paper. One is a list of the *ayimay* of Sayin noyan Qan (Figure 27) and another is the list of the *ayimay* of Tüsiyetü Qan (Figure 28). If we compare the twenty-seven names which appear on the list shown on Figure 27 and on *Karta Mongolii*, five names do not match. As for the twenty names on Figure 28, none of them corresponds to the map. The names appearing on Figure 28 probably belong to a different time than those which are found on *Karta Mongolii*.

On the other hand, if the names on Figure 27 and Map V are compared, there are only three mismatches. The names on Figure 28 and Map III are in perfect correspondence.

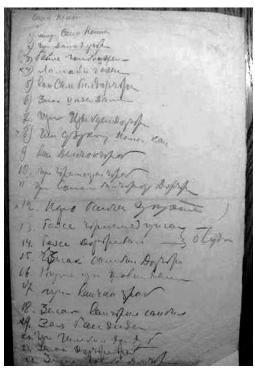


Figure 27

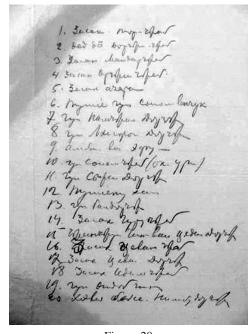


Figure 28

4-4. Rules of reviewing Mongolian administration

In the Kotwicz Archive there are kept two documents, one in Mongolian and one in Russian, although it is not clear which is the original and which is the translation.

Title (in Mongolian): mongγol-un jasaγ qosiγud-un jasaγ tamaγ-a-yin γajar-ud-un bayidal tölöb jerge jüil-üd-i todorqayilan medekü tobči bičig ("Brief document to survey situation of Mongolian qosiγu administration").

Title (in Russian): *programma obzora khoshunnago upravleniya* ("Program of survey of *qosiγu*'s administration").

This material explains ten items to be used for the purpose of surveying Mongolian administration. These ten items are as follows:

- Names of banners (Found on Karta Mongolii),
- Names, titles and age of ruling princes in banners,
- The residences of the ruling princes for each season (Partial description is found on *Karta Mongolii*),
- Place name where the offices of banners are located (Found on Karta Mongolii),
- Ranks and numbers of the officers of banners,
- Military duties of banners,
- System of judiciary,
- Central banner relations: management system for the officers of banners,
- Management system for regional resources and lands of banners,
- System of relay stations, population and the government of people, situation of Russian merchants, temples, agriculture, taxation and debt problems in banners.

Some of these, viz. the underlined items, are designated to be 'written on the map'. Among these, the residences and offices of the ruling princes for each season are partially found on *Karta Mongolii*. The text says 'for each season',³ thus one may expect more than two residences of ruling princess to be drawn. But on *Karta Mongolii* only one residence is drawn for each ruling prince.

Among other items, not underlined, the names of banners are found on *Karta Mongolii*, though they are not specifically designated to be included on the map. That is because the names of banners are represented by the name of the ruling prince of that particular banner.

Many of the items listed here are not found on *Karta Mongolii*, and it could be surmised that there is no strong connection between the list and *Karta Mongolii*. However, it must be pointed out that these items do correspond to information included in the text of *Kratkii obzor*, if this is also taken into account. *Kratkii obzor* is a commentary booklet which came out with *Karta Mongolii* as its supplement. Therefore, this list can be considered to be a preparatory guiding material for *Karta Mongolii* and *Kratkii obzor*.

³ Perhaps it was connected with the nomadic life of Mongols including the life of their rulers.

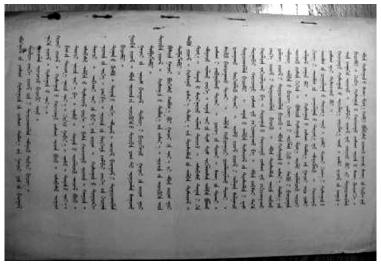


Figure 29

5. Making of Karta Mongolii (From Kratkii obzor)

The relationship between the map-related materials kept in the Kotwicz's Archive and *Kratkii obzor* should not be overlooked. *Kratkii obzor* explains what kind of materials Kotwicz used when preparing the map. It is stated there that Kotwicz referred to some European-made maps. According to Kotwicz, these European-made maps generally had the following features:

- Not prepared systematically,
- A combination of certain separate maps which were prepared without land survey and with inappropriate map adjustment,
- Prepared by individuals. Most parts of the maps are empty. Mixture of useful and useless data. Some are without any data. (Kotvich 1914: 43)

The present author did not pay particular attention to European-made maps of Mongolia kept in the Archive. Therefore, it is uncertain if the Archive holds these European-made maps which may have been used when preparing *Karta Mongolii*.

As for the Mongolian maps used as reference materials, the following features are pointed out:

- Illustrations of banners and illustrations of aimags,
- Details such as mountain peaks, rivers, lakes and ponds, border points, territories of ruling princes, and temples are drawn,
- European drafting technique was unknown. (Kotvich 1914: 43).

It is true that Mongolians did not know European map drafting techniques, and this is a common feature of all nine hand-drawn maps found in the Archive. It may be assumed that the Archive keeps not only Mongolian-made maps Kotwicz referred to when preparing *Karta Mongolii* but also European-made maps.

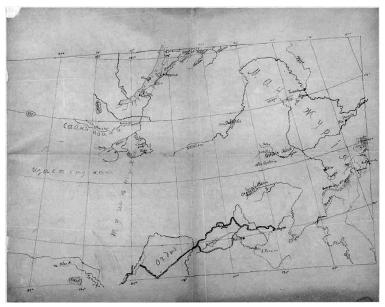


Figure 30-1

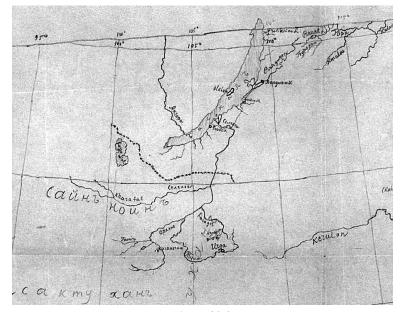


Figure 30-2

Kotwicz states that he 'synthesized European and Mongolian basic materials' (Kotvich 1914: 44) but what could this possibly mean? As it is clear from the earlier discussion, Karta Mongolii is a map prepared with the use of a European drafting technique. Therefore, it may mean that he took the form from Europe and the contents from Mongolia. Figure 30-1 shows an entire picture of a hand-drawn map in pencil, which is held in the Archive under signature 'K III-19, 144, 15'; Figure 30-2 is its partial enlargement. The name of the drawer and the year of map production are not known. The areas covered extend from Lake Khanka and Vladivostok to the east of Uvs Lake (text: Ubsa nor) in the east, and from Ordos (text: Ordus) in the south to the northern part of Lake Baikal in the north, and are somewhat larger than the areas covered by Karta Mongolii. It is clear that this hand-written map has been produced in accordance with the European map-making method, since the graticule is drawn. And it is obvious that this is an incomplete work since it is drawn in pencil only; the graticule seems to be drawn freehand, place-names are written in the mixture of Latin and Cyrillic letters and the style lacks consistency; moreover, apart from the river basins of the Tamir, the Orkhon, and the Tula, no detailed geographical information on Mongolia is provided. On the other hand, coastlines and rivers are drawn quite carefully. Thus, this map is left in a state of 'under preparation', and there is a possibility that this is a draft of Karta Mongolii exemplifying what Kotwicz called 'synthesized European and Mongolian basic materials'.

Taking into consideration Kotwicz's guidelines for drawing a map it is obvious, even at the first glance, that the map signed 'K III-19, 144, 15' significantly lacks such geographical information as large rivers and lakes and place-names apart from the well-known cities and traffic network. The potential ways in which these relatively detailed pieces of geographical information on Mongolia are integrated into 'K III-19, 144, 15' may also be a reflection of the production process of *Karta Mongolii*, which, as mentioned above, Kotwicz calls 'synthesized European and Mongolian basic materials'. Here, attention should be paid to the relationship between Map III and Map IV as shown in Figure 31. Map IV is placed above and below is Map III, and the areas around Erdene Zuu are magnified and compared. What can be observed from this is that some attempts were made to translate Mongolian maps into Russian. Kotwicz's synthesis of the European and Mongolian maps and geographical information was probably the outcome of the process of such an attempt and an error at the same time.

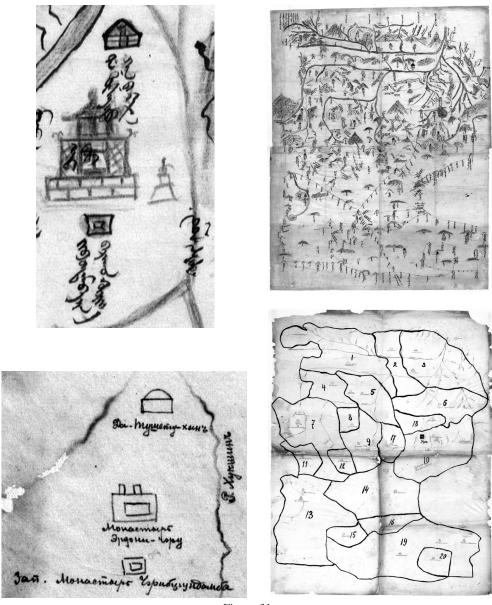


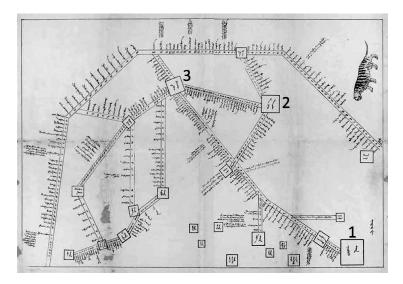
Figure 31

Kotwicz noted in *Kratkii obzor* that he could not get hold of the maps of Ulaγančab League of Inner Mongolia, Qobdu Frontier and Altai Frontier of Western Mongolia and Uriyangqai of north-western Mongolia (Kotvich 1914: 44). In fact, these maps are not found in the Archive, either. Therefore, it seems that the existence or absence of certain materials in the Archive also matches Kotwicz's explanation on the process of preparing *Karta Mongolii*.

The process of integration outlined above is derived from an examination of geographical materials held in the Kotwicz's Archive. Besides this, the memoir of Korostovets (Korostovets 2009) and the correspondence between Kotwicz and Burdukov (Dashdavaa et al. 2011) also tell us much about the collection of map-related materials by Kotwicz.

On 8 December 1909 Burdukov wrote a letter to Kotwicz, informing him that he owns 'a map of the Derbet (Class. Mong. Dörbed) region' (No. 70., Dashdavaa et al. 2011: 131). This may probably be a map related to western Mongolia, where Burdukov chiefly worked. And apparently it was soon delivered to Kotwicz. On 30 December 1909 Kotwicz replied to Burdukov, expressing his wish to take a photograph of this map and publish a book on Derbet using this photograph (No. 1., Dashdavaa et al. 2011: 11). The present author has not been able to find an actual copy of this map.

The following year, on 19 January 1910, Burdukov wrote a letter informing that he sent an old guide map which had been obtained by his acquaintance in Beijing, which showed all places of encampment, existing traffic routes, relay stations etc. (No. 135, Dashdavaa et al. 2011: 72). The map mentioned here seems to be K III-19, 144, 16.



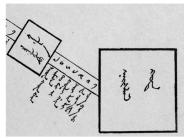


Figure 32

The map is a printout. Place 1 in Figure 32 is described as *neyislel qota*, today's Beijing. Place 2 is *yeke küriy-e*, which is now Ulaanbaatar. And place 3 is *uliyasutai qota*, and this is today's Uliastai. The two parallel lines connecting these square-boxed cities are traffic routes. Between these two lines numbers are written down, and below the numbers the names of encampment places and relay stations are shown in Mongolian letters. Conclusive evidence is yet to be found, but judging from the contents this may be the map which Burdukov gave to Kotwicz.

In a letter dated 9 January 1909 Burdukov tells Kotwicz that he got hold of the photos, taken in Uliyasutai, of the maps of the 'aimaks' of 'Dzasaktu' and 'Sain-noion', i.e. Jasaytu Qan ayimay and Sayin noyan Qan ayimay, and sent them to Kotwicz. He also notes that the original copies of these maps could not be purchased since there was only one original copy for each ayimay (No. 85, Dashdavaa et al. 2011: 57–58). The present author has not been able to ascertain if these two photos are held in the Kotwicz's Archive.

In Korostovets' record of 18 December 1912, the following passage is found:

"I firmly looked at the map of the aimag of Outer Mongolia, which Jamtsarano obtained from Da Lama. It was a very interesting map, which showed [all details] from mountains, forests, rivers, shrines to water wells, and on which explanatory notes were added in Mongolian. What is particularly fascinating about this map is that it draws the routes of Mongolian relay stations along the border between Russia and Mongolia. Despite the fact that this map was drawn from visual reference, I planned to use this map when we prepare a new map of Outer Mongolia, while using the 40-verst map of our General Headquarters as the foundation. (...) It was necessary to draw, in a visually clear way, what kind of place Khalkha was, with whom we made a treaty. The chief difficulty was to identify the borderlines between banners which make up the four main aimags, and the names of banners." (Korostovets 2009: 209).

From this fragment we can see that Korostovets, who was involved in the production of *Karta Mongolii*, acquired the map from Jamtsarano, who in turn obtained it from Da Lama. It is also clearly stated that on the map are marked mountains, forests, rivers, shrines and water wells, along with explanatory notes in Mongolian and the routes of relay stations on the border between Russia and Mongolia. As mentioned earlier, some of the maps held in the Kotwicz's Archive are clearly reproductions drawn by Jamtsarano, and on these maps all the details are marked, such as mountains, forests, rivers, shrines, water wells, explanatory notes in Mongolian and Russian and the routes of relay stations on the border between Russia and Mongolia. From this passage by Korostovets we know that in the map making project by Kotwicz and Korostovets Jamtsarano played a certain role and the map he obtained from Da Lama Tserenchimed was used. It is very likely that those maps in the Kotwicz's Archive which leave clear traces of Jamtsarano's involvement are reproductions made by him or someone close to him. As it was mentioned in the

correspondence of Burdukov's (No. 85), which we looked at earlier, they were probably reproduced because original copies could not be obtained.

On 15 June 1913, Korostovets wrote the following words:

"I agreed with a drafting company in II'in to publish a Mongolian map which has been drafted by El'tekov and shows the distinction of *khoshuns* (Class. Mong. $qosi\gamma u$). As I have already said, our knowledge of Mongolian geography is completely obscure. To be precise, we even do not know the borders of Khalkha. And in general, we know only little about our new federation. I think my map will be of great necessity. Kotvich (= Kotwicz) promised to add an overview of Mongolian politics and history to the map." (Korostovets 2009: 403).

In 1913, 'a Mongolian map which ... shows the distinction of *khoshuns*' was ready to be published. Korostovets believed the need for this map was high since Mongolian geography was not known very well, even the borders of Khalkha were not clear. And to this map Kotwicz was going to add an overview of Mongolian politics and history. It is clear that what Korostovets refers to here are *Karta Mongolii* and *Kratkii obzor*.

What is worth noting is that Korostovets explains the importance of this map in relation to the poor geographical knowledge of his time, where even the borders of Khalkha were unknown to them. If we trust Korostovets's account, *Karta Mongolii* should indicate the borders of Khalkha. As already shown in Figure 3, Khalkha is painted in orange and the borders are clearly marked. Yet it should also be pointed out that another borderline is drawn on this map. It is the borderline between Russia and China, which runs partly overlapping with the northern border of Khalkha. As it was seen in Figure 3, this borderline and the border of Khalkha overlap up to the north-western part of Lake Khubsugul (Class. Mong. Köbsögöl), but beyond this point they split into two lines. This suggests that Uryankhai Land ('6' in Figure 2) is within the border of China but does not belong to Khalkha.

Karta Mongolii and *Kratkii obzor* were completed through the process discussed above. In Kotwicz's letter to Burdukov, dated 7 January 1914, Kotwicz says that he sent *Karta Mongolii* to Burdukov (No. 13, Dashdavaa et al. 2011: 27–28), and Burdukov acknowledges the receipt of this in his letter to Kotwicz, dated 29 May of the same year (No. 101, Dashdavaa et al. 2011: 185–189).

Conclusion

To conclude, it is clear that almost all the maps and the map-related materials kept in Kotwicz's Private Archive in Cracow were the materials used when preparing the map *Karta Mongolii* and the text of *Kratkii obzor*. The process of preparing *Karta Mongolii* can also be traced in the letters which Kotwicz exchanged with Burdukov and in the memoirs of Korostovets.

It is very interesting to note that Mongolian scholar, O. Batsaikhan, evaluates the map labelled *Karta Mongolii* as the first political map of the state of Mongolia (Mongol Uls) in the twentieth century (Batsaikhan 2011: 334). It is interesting because it means that Kotwicz and Korostovets, non-Mongolians, gave a form to the twentieth century Mongolia or Mongol Uls on a map. If this is so, it could be said that the maps and map-related materials kept at the Kotwicz's Private Archive which have been discussed here constitute a valuable set of materials in clarifying the process of forming the 'shape of political Mongolia'.

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