

for Official Use (1702-1730: completed by Remezov's sons).<sup>15</sup> These atlases were "swan songs" of traditional Russian cartography. The original features of Russian cartography in the seventeenth century, in particular Remezov's legacy, have been studied by Russian historians such as A.I. Andreev, A.V. Yefimov, L.A. Gol'denberg, F.A. Shibano, and B.P. Polevoi. This chapter will not dwell on details of these studies which I have discussed, used, and, where possible, complemented in my books. Here, I will focus on the originality of traditional Russian cartography, in other words, its differences from the European map-making paradigm, and the influence of this European paradigm on the later development of Russian cartography in the eighteenth and nineteenth centuries.

First of all, Russian maps before the eighteenth century had no mathematical foundations in the "Ptolemaic" sense. There were no geographic coordinates, uniform scale nor cartographic projection of any kind. Few cartographic works were compiled with full observance of scale. This conclusion was made by V.S. Kusov as a result of his study of sketch maps of caves forming the Kiev-Pechersk *Lavra* [Monastery] published in the *Paterik Kievo-Pecherskii* [Lives of the Saints in Kiev-Pechersk] in 1661 (Figure 3).<sup>16</sup> Up to the beginning of the eighteenth century, the bulk of Russian geographic drawings continued to be scale-less and done



Figure 3. Lives of the Saints in Kiev-Pechersk

15 The most significant of these atlases, *The Drawing Book of Siberia*, is stored by the Russian State Library in Moscow, whereas the Manuscript Division of the Russian National Library (the former M.E. Saltykov-Shchedrin Public Library) in St. Petersburg takes pride in keeping *The Drawing Book for Official Use*. Unfortunately, *The Chorographic Drawing Book* was stolen by Lev Bagrov, when he emigrated after the 1917 Revolution. Until recent years the collection had been stored by the Houghton Library of Harvard College in the United States, but presently it is unknown where it is.

16 Kusov, *Kartograficheskoe iskusstvo...*; Idem, *Chertezhi Zemli...*

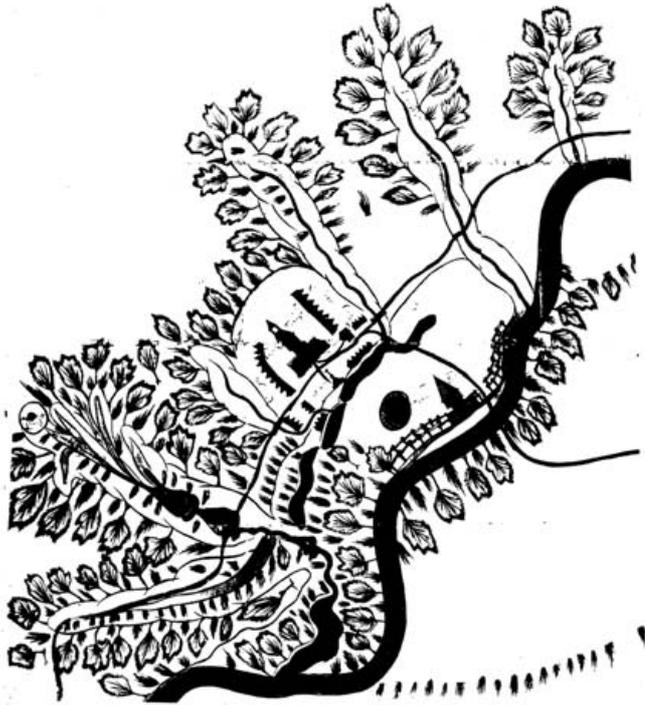


Figure 4. The Vicinity of Gorodets example, providing small-scale maps with large-scale plans of major towns and fortresses. In design, Russian seventeenth century maps were diverse. One can see how the rough, primitive large-scale plan of the vicinity of Gorodets (presently in Nizhegorod Oblast', Figure 4) differs from the relatively sophisticated middle-scale map of the Vorskla River region (the present North-Central Ukraine, Figure 5) and the map of territory to the South of Ryl'sk (presently, Kursk Oblast', Figure 6).

with one aim in view - to display positional features relative to each other within a certain area (topology). The draftsmen believed it sufficient to observe metric properties in their works by providing them with detailed indications of dimensions and sizes: areas for estates and households, and distances in versts or days en route.

To make their works more comprehensive, Russian cartographers often used different scales within a single map, for

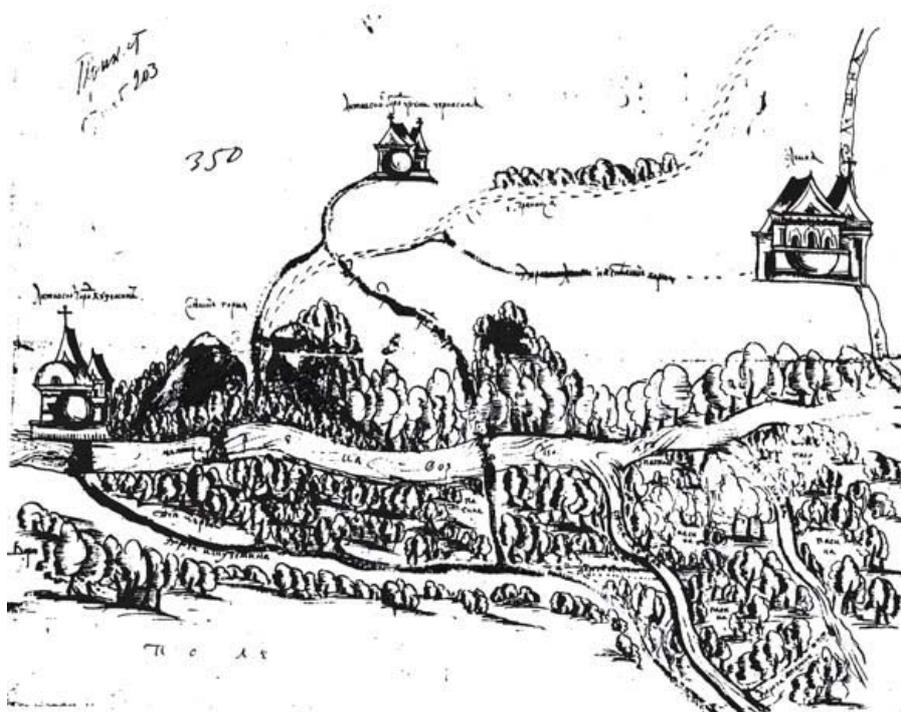


Figure 5. Map of the Vorskla River Region



Figure 6. The South of Ryl'sk

As mentioned above, there were cases in which these drawings were based on elementary measuring, but they were hardly more than a “graphic translation” of textual descriptions (this tendency was especially manifest in regards to various kinds of route descriptions: *rospisi*, *dorozhniki*, *poverstnye*, *smotrennye*, *dozornye knigi*), and only for the largest scale plans of buildings was direct sketching probably used. On the other hand, it had become a tradition to complement graphic work with various sorts of notes - “legends” and “books” - which provided not only careful description of elements on a map, but also data on sources, cartographic symbols, and methods of map-making. This method was used most profoundly by Semen U. Remezov, whose explanations in his *Drawing Book of Siberia* can serve as a good introduction to Russian national methods of mapping. One can see Remezov’s method on the copy of his *Street Drawing of*

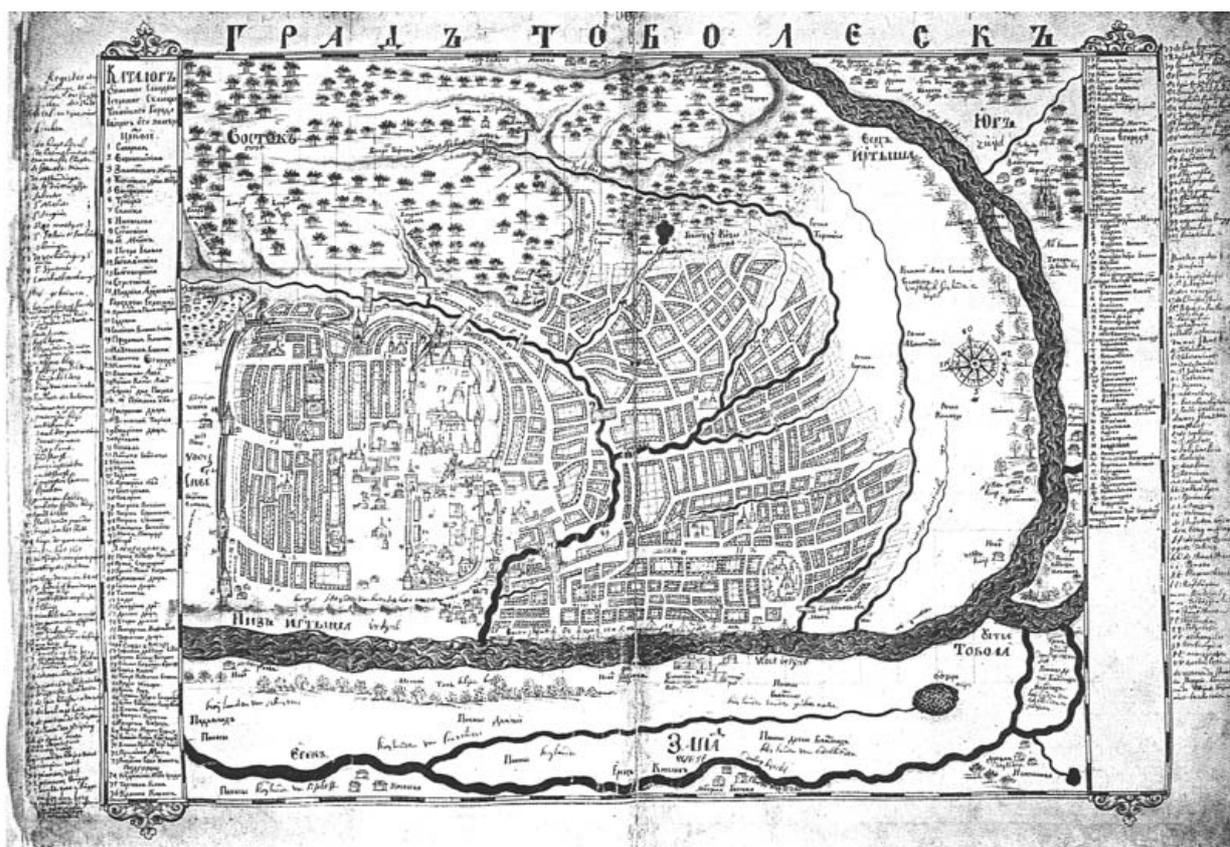


Figure 7. Street Drawing of Tobolsk Town and Nearby Settlements

*Tobolsk Town and Nearby Settlements on High and Low Ground* (Figure 7)<sup>17</sup> from the *Drawing Book of Siberia*. Remarkably, another map in this atlas - *Drawing of the Land of Nerchinsk Town* - pictures Japan in a certain detail, one of its earliest appearances in Russian cartography (Figure 8).<sup>18</sup>

Russian cartographic drawings were extremely rich in toponymy (place names), which was a crucial parameter organizing all contents of cartographic images. Especially numerous place names can be found in the surveys made by the *Pomestnyi Prikaz* (the department in charge of regulating land ownership) in which the names of the tiniest landscape features were used to determine the borders between land properties. Such drawings are valuable sources for the study of microtoponymy in Central Russia in the seventeenth century since their reliability is ensured by their functional role in determining land properties.

Place names played important roles in communication, exploration, and mapping especially during Russia's advance in Siberia, which began in the sixteenth century, and, later on, towards the shores of North America. In this process Russian *zemleprokhodtsy* [trailblazers] used geographic information obtained from Siberian tribes, the most crucial of which was data on the native

17 "Ulichnyi chertezh goroda Tobol'ska i okrestnykh poselenii na vysokoi i nizkoi zemle," Rossiiskaya gosudarstvennaya biblioteka, Otdel rukopisi (RGB OR), S.1, 1701, list no. 1.

18 "Chertezh zemel' Nerchinskogo goroda": RGB OR, S.1, 1701, list No. 19.

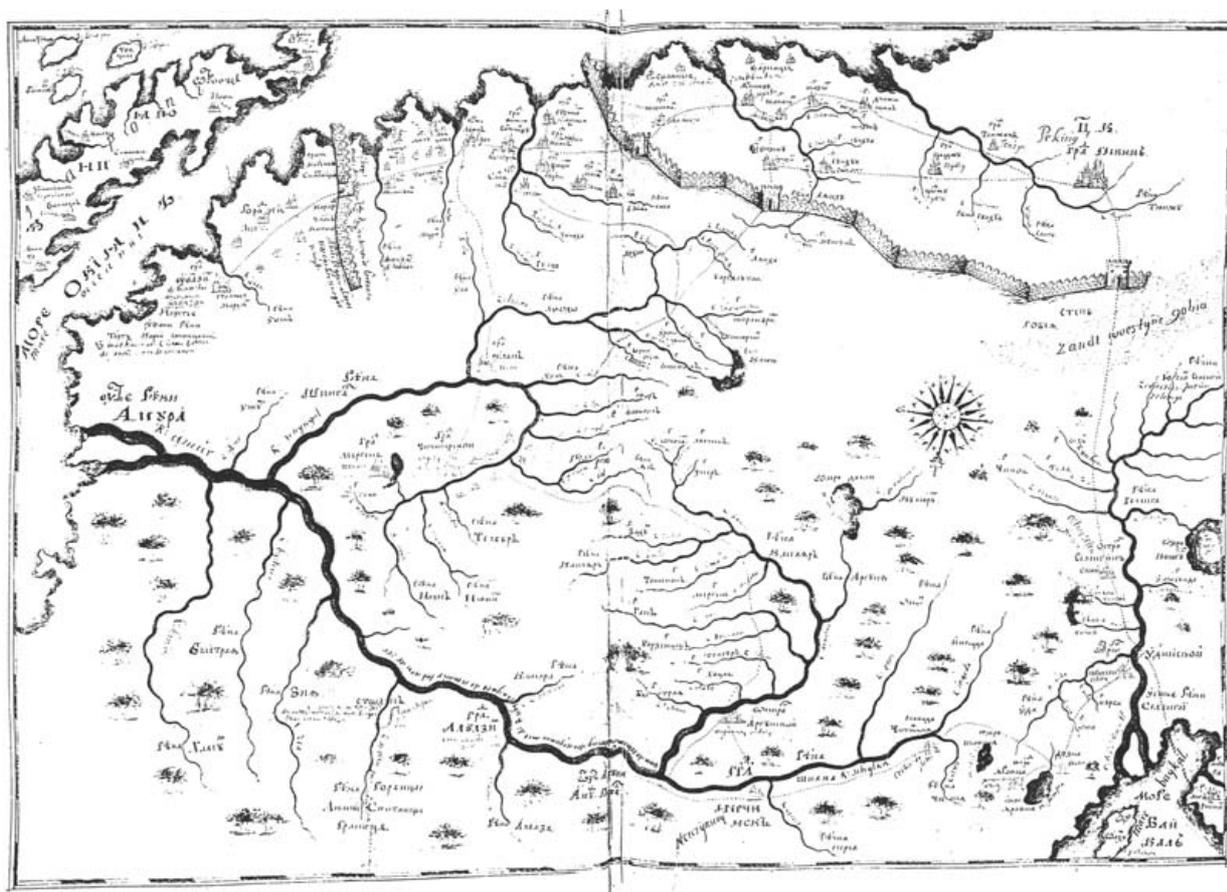


Figure 8. Drawing of the Land of Nerchinsk Town

place names for orientation in the unfamiliar environment. Due to the relative slowness of this advance during the sixteenth through eighteenth centuries, Russians assimilated, to some extent, to the natural and ethnic environment with the result that native toponymy was accepted by Russians as their own and preserved, even if in a defaced form, on cartographic drawings and maps. This is the reason why we find old native place names on modern Siberian and Alaskan maps.

The majority of Russian cartographic images in the seventeenth century were plane or orthogonal drawings, even for town maps. In this aspect, Russian town maps differed very much from West European maps of that time, which were in many cases bird's-eye views or perspective drawings. For example, on the map of the Russian fortress of Yablonev, compiled in the second half of the seventeenth century, one can see a plane image of defense structures as a whole together with facades of all their walls and towers (Figure 9).<sup>19</sup> The difference of approach between Russian and West European map-making is clearly shown by the comparison between the map of Yablonev and the Polish map of Kamieniec Podolski compiled in 1672 (Figure 10).<sup>20</sup>

19 Rossiiskii gosudarstvennyi arkhiv drevnykh aktov (RGADA), f.210 (*Sevskii stol*), st. 397, listy 401-402.

20 Plan of Kamieniec Podolski. 1672. Author: Anrej Trjebizki. The only surviving copy of this map is stored at Jagiellonian Library in Cracow, Map Department, no. M 53/28. Photo courtesy of Jagiellonian Library.

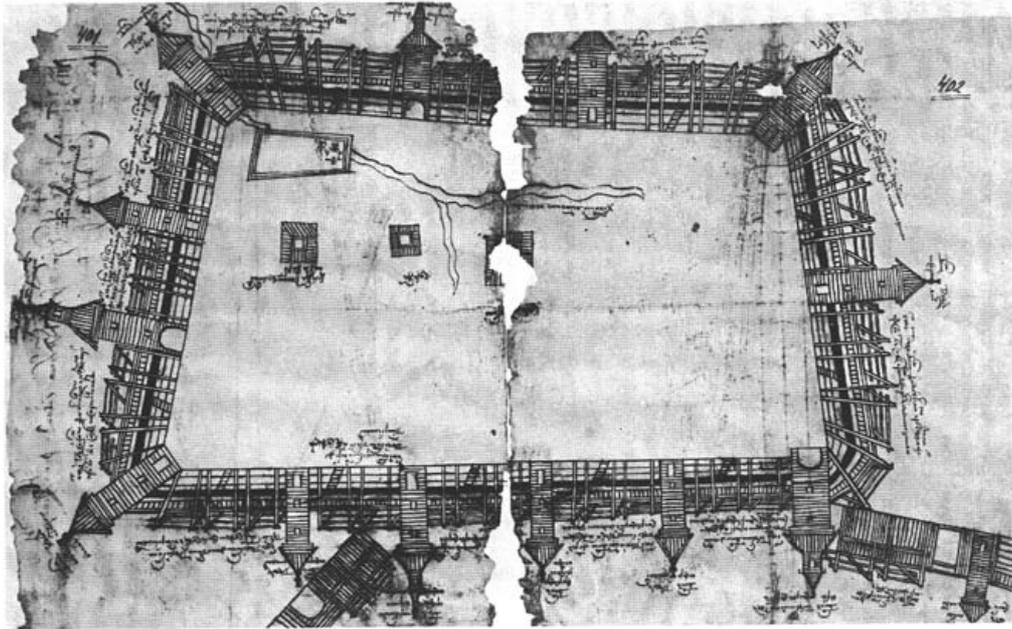


Figure 9. Fortress of Yablonev

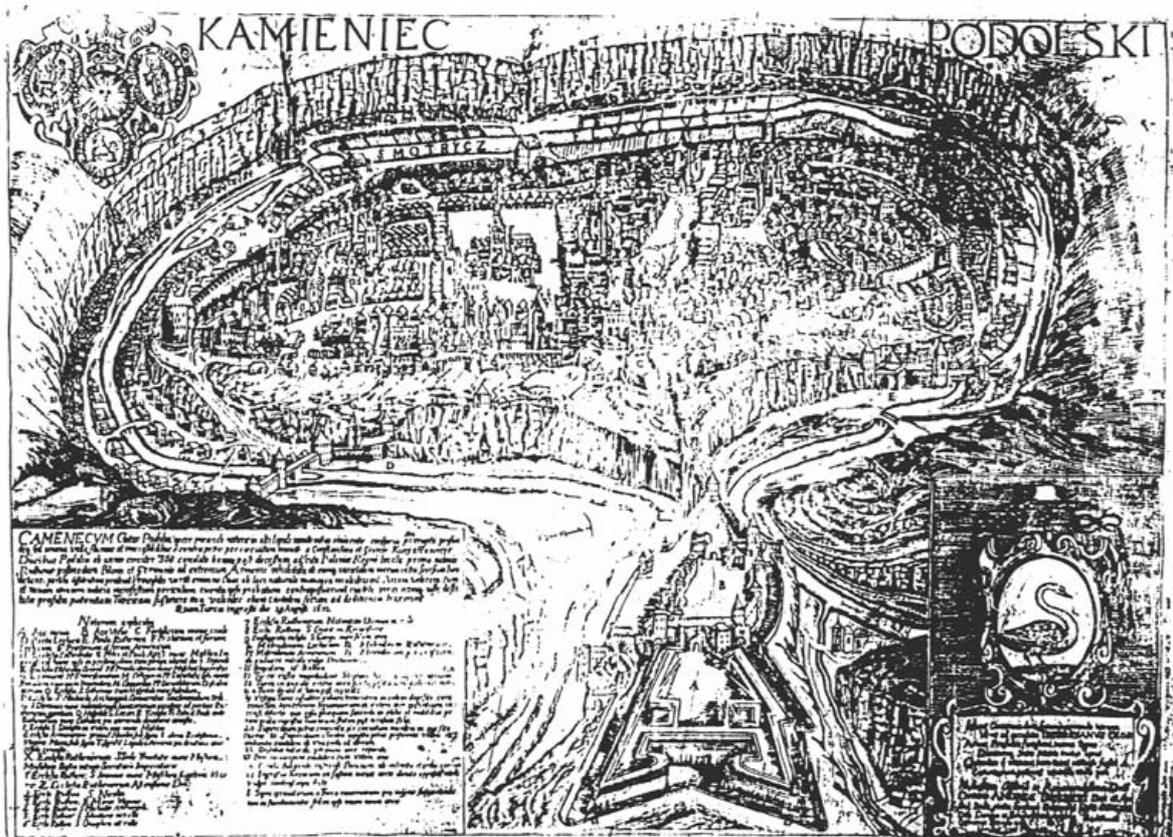


Figure 10. Polish Map of Kamieniec Podolski

On the other hand, there were some images of towns, monasteries, and convents used in parts of Old Russian icons with different principles of presentation, based on ancient Orthodox Church art, which also relied upon multi-central projections, instead of strict rules of one center perspective. This type of



cartographic image may be seen in Figure 11, which is a fragment of an icon dedicated to the life of Saint Makarii Zheltovodskii.<sup>21</sup> The icon shows the Saint together with the plan of the Makar'evskii Monastery founded by the Saint himself near the junction of the Kerzhenets and Volga Rivers in the fifteenth century. The monastery has survived into our time (in Kostroma Oblast).

Figure 11. Icon of St. Makarii Zheltovodskii

The majority of Russian cartographic images of the seventeenth century are manuscripts and no more than six printed maps from that period survive today, one of them being the aforementioned plan of the Kiev-Pechersk Monastery. V.S. Kusov, who spent many years in the quest for antiques of Old Russian cartography, believes that approximately 1,040 Russian geographic drawings (not including those in *The Drawing Books of Siberia* by S.U. Remezov) have survived to this day. They are stored in sixteen archives and libraries in Russia, Ukraine, the United States, France, and Sweden.<sup>22</sup> The majority of them are large-scale maps showing land ownership, drawings of towns and strongholds, and also maps of rivers and frontier territories. There are a small number of general maps of large parts of Russia, the oldest of them being the well-known Siberian maps of 1667 and 1673.

21 Icon of St. Makarii Zheltovodskii. 1694. The Russian State Historical Museum. Code I-VIII-4418. Photo courtesy of the Russian State Historical Museum.

22 Kusov, *Chertezhi Zemli...*, p. 5.