

Poles in the Economy of Siberia and Central Asia in the Second Half of the 19th Century (As Illustrated in the Poklewski-Koziell Family)

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Abstract: In the 19th century, the Russian Empire continued its expansion by annexing new lands in Siberia and Central Asia. After the end of military expeditions, these lands were gradually integrated in the all-Russian market. The gap between these regions and major economic centers including Russia and the dominance of the traditional economy based on agriculture, required huge financial resources to develop the area and create a capitalist economy in Asian Russia with factory production, enhanced transport infrastructure and a wholesale and retail trade network. However, the government did not have the funds to address this important task. Therefore, the function to develop the area was assumed by local pioneering entrepreneurs (frontiersmen) while the tsarist administration gave them administrative support. This contributed to the emergence of entrepreneurship among ethnic minorities that occupied empty economic niches.

Key words: Russian Empire, poles, Siberia, Central Asia, trade, distillation, transport, river steamship company, national entrepreneurship, Poklewski-Koziell family

INTRODUCTION

Annexation of territories in Siberia and Central Asia by Russia has been so far given ambiguous interpretation. Russian historians of the 19th and early 20th century defined it as a conquest (Yadrintsev, 1982; Olferev, 1899). In the interwar period (1920-1940), Soviet historians continued with these views by proving the thesis of the imperial expansion of the Russian foreign policies since the time of Ivan IV. This viewpoint is now dominant in the Western Russian Studies (Kerner, 1942; Sumner, 1947; Harrison, 1971). In the second half of the 20th century, this process was regarded as peaceful and voluntary integration in Russia. Without denying the existence of elements of “conquest” at the initial stage of the integration, historians put the emphasis on “peaceful economic and cultural development” of the new territories (Goryushkin and Minenko, 1984). Currently, historiography suggests no uniform approach to this problem. According to Zuev, absence of active discussions is caused by fears to provoke an escalation of interethnic relations in Siberia (Zuev, 1999).

In the late 20th and early 21st centuries, historians concentrated on the issues of economic development of the Asian territories that were part of the Russian Empire. Most influential research centers formed in Barnaul, Irkutsk, Novosibirsk and Tomsk. A specific object of study has become national communities that formed within the framework of imperial national policies. This

has resulted in a large number of papers and monograph about Germans, Poles, Jews, Estonians in Siberia and Central Asia (Skubnevsky, 2001, 2010; Kalmina, 2003; Karikh, 2004; Shaidurov, 2013, 2014). Parallel studies into national communities outside Russia are taking place (Kijas, 2000; Masyarz, 2002; Kaganovich, 2003; Aadu, 2012).

MATERIALS AND METHODS

In this study, we will benefit from the example of the Poklewski-Koziell family and define the place and role of Poles in the economic development of Siberia and Central Asia in the second half of the 19th century.

As main methods, we will employ principles of the regional approach, represented on the Russian material by Kappeler (1992) in his monograph in the form of reconstruction of specific aspects of history of Poles in Asian Russia. On the other hand, we will also apply some principles of the situational approach that has been lately widely used by Russian and foreign historians to describe history as resulted from the interaction of various actors.

The work is largely based on archival documents and published sources (legislative and record keeping materials). An essential part is given to the notes by Poklewski-Koziello (1885) which contain unique materials on his business activities. The integrated use of these resources will help accomplish the objectives set above.

RESULTS

Throughout the 19th century, the Asian part of Russia saw sporadic formation of the Polish community that had its main sources in repressive exile of anti-government protesters and voluntary resettlement as a form of labor migration. Representatives of the same family could be among exiles and in the ranks of tsarist officials. An example is a family of the Poklewski-Koziell whose members lived from the Urals to the Tien Shan in the second half of the 19th century.

Once in the new conditions, Alfons and Ivan Poklewski-Koziell used for their own purposes the patronage of the royal administration to accumulate initial capital. The same resource was leveraged to survey natural resources that could be used in the future.

The intensive entrepreneurial activities led to the creation of a capitalist enterprise that operated in various areas of the economy (trade, transportation, processing of mineral and agricultural raw materials and construction).

DISCUSSION

Throughout the 19th century, the Russian Empire continued annexing new lands in Asia. Indigenous population there retained its traditional economy. It was based on nomadic cattle breeding, agriculture using irrigation ditches irrigation, hunting and gathering. Trade and craft preserved their pre-capitalist features.

The political situation brought about the need for not only administrative securement of the new lands but also their early integration in the economic space of the Empire. Russian peasants, who resettled in Asian Russia, promoted agricultural colonization. A number of objective reasons did not allow them to be involved in creating capitalist industry and modern transport system as well as developing trade. This role was adopted by some of the national minorities (Germans, Poles, Jews, etc.) who shaped new economic niches and occupied them in the following decades.

One of the most vivid examples of the Polish entrepreneurial nobility was Alfons F. Poklewski-Koziell (Koziello-Poklewski) (1809-1890), who after retirement (1852), turned to entrepreneurship.

The local administration represented by Governor General Petr D. Gorchakov repeatedly expressed interest in the development of river traffic between major cities. In this situation, consent was obtained in St. Petersburg to attract private investments and establish a Siberian steamship company with monopoly rights. The company was established with the participation of a Tyumen merchant Tyufin who built a steamship, "Osnova" and carried out a number of test voyages along the Tura River.

In 1839, a Rostov merchant of the 1st guild, Nikita F. Myasnikov, previously associated with the liquor excise system (*vinnyi otkup*-a right to sell wine and liquor sold by the government) received a privilege to organize a towing steamship company on Siberian rivers and lake Baikal and locate the steamship company in Tyumen. The choice of this city was determined by a complex of factors: the area was well developed and populated; it featured busy shipping activities, growing cargo competition, proximity to the Urals and the start of the Siberian waterway. A. Poklewski-Koziell was appointed by Gorchakov to monitor the activities.

In 1843, "Osnova" made a voyage from Tyumen to Tobolsk allegedly already "under the banner of" A. Poklewski-Koziell. It is likely that by this time with the support of Governor General Gorchakov he had bought out the steamship from Myasnikov. In 1857, the latter conceded the privilege to create a steamship company in Western Siberia first through the "commission agent right" and later completely. A. Poklewski-Koziell became not so much his inspector as a partner.

A. Poklewski-Koziell bought 50 and 10 horsepower engines in Sweden and installed one on "Osnova", setting her afloat in a new capacity. After receiving privileges for a 10 year steamship line on the rivers of Western Siberia, he created a steamship company "Parokhodstvo A.F. Poklewski-Koziell and Ko." and launched regular towing traffic between Tyumen and Tomsk for commercial purposes. But the enterprise had no significant commercial success. The newspaper "Tomskiy Gubernskiy Vedomosti" wrote that "Osnova" made one voyage from Tyumen to Tomsk in the Summer, sometimes remaining in the Ob ice and having no time to reach the port. Of course, due to such inaccuracy, losses were incurred by both the ship and goods owners" (NP, 1863).

In the first half of the 1850s, A. Poklewski-Koziell made an attempt to obtain a privilege of maintaining steamships on the territory of the Kirgiz steppe. For this purpose, he made use of his connections to secure the support of the Governor General of Western Siberia-Gasford. But buying steamships and delivering them to Central Asia required much money that A. Poklewski-Koziell was unlikely to have. The latter fact impelled him to work together with merchant Vladimir Kuznetsov whose funds helped study the course of the Ili River in 2 years (1852-1853). As Gasford later reported in his memorandum to Emperor Nicholas I, "the study found that the Ili River all the way from Qulja to Lake Balkhash is navigable <...>. It is navigable along the entire length". This fact served as a basis for claiming the 15 years privilege for the establishment and maintenance of steamships on the Ili River and Lake Balkhash.

Improving transportation in the middle of the 19th century in Eastern areas of Central Asia had not only economic but also strategic reasons. In 1847, the territory of the Great juz was incorporated into the Russian Empire. At the turn of the 1840-1850s, Trans-Ili Valley was actively developed by the Russian military and first migrants. In 1854, the Trans-Ili fortifications were renamed Verny (today's Almaty) which became an outpost on the border with the Qing's China and a base for further advancement of Russian military units to the South.

Russia's access to the border with China in this region contributed to strengthened Russian-Chinese trade which was mainly concentrated in the city of Qulja (China) in fact, an administrative and military capital of the Qing Xinjiang.

Of course, Poklewski was well aware of all the benefits to be gained through the ownership of the transport monopoly in Semirechye (Zhetysu). This, in particular was also pointed out to by Gasford in his memorandum. However, he pursued a purely administrative purpose by supporting the initiative of Poklewski and Kuznetsov. In particular, he believed that starting a steamship company "will facilitate the provision of our settlements in the Trans-Ili Valley with military and other supplies. The Trans-Ili Valley thus will make a solid basis for military operations which may occur in Central Asia". In addition, it would allow the Defense Ministry to halve bread transportation costs for military units stationed here.

In March 1854, a meeting of the Second Siberian Committee considered the question on "a steamship company on Lake Balkhash and the Ili River" and made a decision to grant Poklewski and Kuznetsov a 15 years privilege "on the same basis as a privilege was granted to merchant Myasnikov in 1839 to establish and maintain a steamship company on Lake Baikal and certain Siberian rivers".

In 1856, engineer Grabinsky on the instructions by A. Poklewski-Koziell made a detailed description of the Semirechye River System including Lake Balkhash. In the same year, a sailboat "Sv. Nikolay" was built on the Bertyskaya pier and made a trip with 8 thousand poods (pood-a Russian unit of weight equivalent to about 16.4 kg) of bread to the Ili fortifications (the future town of Verny, Almaty) (Poklewski-Koziello, 1885). Maps drawn during the expedition and measurements made were still relevant in the mid 1880s when they were taken advantage of by another member of the Poklewski family.

However, the partners could never implement this project. In 1857, the Siberian committee resumed its consideration of this question. It was found out that they failed to arrange a steamship company in four shipping

seasons from receipt of the privilege. The main reason given was the Crimean War, "that eliminated a possibility to receive from abroad all that was necessary to arrange and maintain steamships as well as the end of our trade with China in Chuguchak".

A resolution by the Siberian Committee, according to the proposal by Finance Minister Petr F. Brok and with the consent of Interior Minister Sergey S. Lanskoj and Transport Minister Pavel P. Melnikov, allowed A. Poklewski-Koziell and Kuznetsov to organize a steamship company in the next three shipping seasons and retained the total privilege period unchanged. This is clear evidence that the government circles were interested in strengthening Russia's position in the region. However, due to its unprofitability, the project was never realized in the middle of the 19th century.

With the Ili-Balkhash project, A. Poklewski-Koziell gradually strengthened his position in Western Siberia. For instance, in 1853, a new company was started by merchants from Selenginsk-Maryin and Kondinsky, Irkutsk-Khaminov and Tomsk-Tetskov that bought from Belgium a steamship "Ermak" with a high pressure 100 hp engine in the iron casing. In 1857, A. Poklewski-Koziell joined this steamship company with the earlier steamship "Osnova" and the new one-medium pressure "Irtysh" (80 hp). As a result, a new steamship company named "Polza" was established.

A. Poklewski-Koziell expanded his presence in the company in 1859 by purchasing a steamship "Rabotnik" with a capacity of 120 hp. According to the memoirs of N.V. Shelgunov, this ship was one of the best passenger vessels in Siberia.

In 1860, the entrepreneur transported the government's salt from Koryakov to Tobolsk along the Irtysh instead Berens who signed a contract for the carriage of salt at a very cheap price and had no time to arrange either a steamship or barges before the appointed date. The "Polza" company which consisted of five co-owners was divided in 1859: steamship "Osnova" went to Maryin, "Ermak"-to Khaminov, "Irtysh"-Tetskov and the rest of the partners (Poklewski-Koziell, 1885) were allocated shares of stocks (NP, 1863).

Further, prosperity of the entrepreneur was due to the carriage of goods in transit. Shelgunov noted that "all trade with China is now being carried out in this way; they are transporting iron, colonial goods, tea, cloth and cotton velvet. The price per pood varies depending on the goods quality; for colonial goods-40 kopecks per pood, for manufactory ones and teas-50 kopecks per pood, for iron-25 kopecks. In 1861, six 570 hp steamships earned (freight) 350 thousand or 637 rubles per each hp".

The enterprise's development was clearly demonstrated by the opening in Tyumen and Tomsk of two trading houses which controlled the whole river route between the Tomsk and Tobolsk provinces. At the same time he concluded contracts to supply provisions to the army, carrying them on his own barges. After 1863 he provided free transportation on his steamships for participants in the 1863 January uprising, sent to Siberia. Later, many Poles were employed at the enterprises of A. Poklewski-Koziell which gave them an opportunity to survive the harsh conditions of exile.

After the abolition of the liquor excise system in the region, he bought state-owned distilleries and became one of Western Siberia's first vodka producers. Later, they laid their hands on iron works, gold and asbestos mines, forest districts in the Urals and Siberia (Skubnevsky, 2001).

At the first stage, A. Poklewski-Koziell focused his attention on the Tyumen District due to its proximity to his Perm distilleries. These plants were able to ship liquor supplies to Tobolsk and Tyumen already in the early 1860s. The sphere of its interests in Western Siberia gradually expanded and by the mid 60 sec of the 19th century his wholesale warehouses dominated the liquor markets of the Tyumen, Yalutorovsk, Turinsk Districts of the Tobolsk Province as well as in the Omsk uезд (uezd in pre-revolutionary Russia, a middle-level subdivision of a province) of the Akmola Region. In 1864, A. Poklewski-Koziell together with merchants Korchemkin and Kuznetsov concluded an agreement that formed a partnership in nature, under which the parties should coordinate their activities in product sales (Mariupolsky, 1995). It determined the liquor pricing as well as the volume of its sales in those districts where the members of the partnership had common interests. Such an agreement put other wholesale liquor merchants in a difficult position as it made it very difficult to compete with its authors. According to A. Mariupolsky's estimates, the turnover of the three monopolistic traders (in 1866) amounted to 73.5% of all liquor in the Tobolsk Province. It is possible to share Mariupolsky's opinion that it was one of the first business associations between liquor merchants in Western Siberia which can be classified as an early monopoly.

In the late the 19th century, heirs of Poklewski-Koziell owned liquor and vodka distilleries in the Tobolsk Province. By the production volume these were the industry's largest enterprises. For instance, the Padun distillery, commissioned in 1863 was second only to the facility located in the Verkhneudinsk District of the Trans-Baikal region that was owned by hereditary honorary citizen Ivan F. Goldobin (101 thousand against

51.2 thousand pails of alcohol) (Orlov, 1900). But the number of employees (93) at this enterprise was unrivalled in Western and Eastern Siberia. The Padun distillery annually sold its products in the amount of 620 thousand rubles (Ibid.). The alcohol realization was facilitated to a large extent by the availability of his own vodka distillery in Tyumen that had operated since 1889. According to statistics, in the late 1890s it produced up to 3 thousand pails of vodka and liqueurs. In addition, there was a vodka distillery in Omsk, launched in 1868. Its production output was much more modest compared to that of the Padun distillery: it annually distilled 2.8 thousand pails of vodka and liqueurs in the amount of 20 thousand rubles (Ibid.). Finished products were realized by means of a well-established network. Works in liquor warehouses and cellars quite often employed experts from Polish exiles and settlers.

In 1872, a relative of A.F. Poklewski-Koziell, Ivan I. Poklewski-Koziell (1839-approx. 1890) was sent to the Verny town for service. He was involved in the 1863-1864 Polish uprising and emigrated to France after its suppression. After he returned to Russia, he was stripped of his noble rank and sent to Semirechye as a private Cossack.

In his new position, he attracted the attention of the military governor of the Semirechye region, Gerasim A. Kolpakovsky. The graduate from the St. Petersburg Institute of Transport Engineers Corps was assigned to make a design and estimate for the construction of a bridge across the Ili River already in autumn 1872. The pardoned political emigrant handled this work brilliantly which gave him an opportunity to continue his construction career.

Constant trips by Poklewski across the Ili valley and adjacent areas contributed to their geological exploration. For instance, he discovered rich deposits of mineral resources: alabaster, marble, agalmatolite, alum earth and rock salt. He later wrote that potassium and saltpetre were extracted by the local population from the earth impregnated with these salts (Poklewski-Koziello, 1885). Potassium mixed with Glauber's salt was bought up by the Chinese for further soap manufacture.

It was only natural building materials were of interest to Poklewski as he was one of directors of construction projects in Verny and the surrounding area. But as Poklewski constantly lacked funds to maintain his family and had a small salary, he had to combine his service with private business activity. There was plenty of work for the highly qualified and experienced engineer Verny in this period, as the town experienced a construction boom. It concerned not only preparing designs for public buildings but also monitoring private construction. Later he started

several workshops near the town to manufacture building materials-burnt bricks, blocks for basement floor masonry, marble facing, etc. When fitting the workshops with equipment, he made use of the experience gained during his stay in France stone cutting mechanisms were water-driven and according to the owner himself were “modeled on those which he chanced to see on the banks of the Rhone” (Ibid.). However, this was not the only entrepreneurial activity of I. Poklewski. Since, the late 1870s he began to actively explore the Qulja area that at that time belonged to Russia. The result was the discovery of coal deposits. Somewhat later, Poklewski made them his property by probably taking advantage of favors from the Steppes governor-general, Kolpakovsky, who patronized him. The latter is evidenced by the way he later writes about them: “As an example of mineral wealth, I point out the coal mines owned by me personally” (Ibid.). The coal fields were rich. For instance, there was a 30 arshin (about 21 m) thick coal seam discovered only in one mine (Ibid.).

But this field had no practical benefits as long as there were not discovered deposits of iron carbonate and fire clay near the Ili River. All this made possible the construction of a metallurgical to further on realize the iron in the local market. A small mechanical facility, cast iron and copper foundries had already been built by the beginning of the 1880s. This was followed by the manufacturing of crucibles required for the metallurgical cycle. Great success was achieved with the in-house manufacturing of all components for a flour mill on the American design.

Poklewski himself explained the need to create a full cycle enterprise through his commitment to building ships to address the need to arrange as cost-effective transport routes in the province as possible. He acted as a statesman in this matter, pointing out that “it is necessary to first arrange cheap transport routes and then agriculture, industry and mining will start rapidly developing” (Ibid.). In this regard, a positive example for him was represented by the United States.

However, the transfer of the Qulja valley to the Qing's China during the ongoing demarcation of the Russian-Chinese border in the region brought about changes in Poklewski's entrepreneurial activity. He had to use wooden barges to transport property, machinery and tools to the Russian territory within a short time.

Although, numerous problems slowed down the development of the local river transport, the first steamship was laid down October 1, 1882. Steamship parts were made at the factory of Edward Hayes in Stony Stratford (England). Poklewski had no his own funds to buy all the necessary. He had to seek support from local entrepreneurs. It was not necessary to describe benefits

from steamship companies at the end of the 19th century. However, economic risks were extremely high: the purchase of parts required far less funds than their delivery to the place of assembly. In addition, there was a need to repair component parts broken en route.

Poklewski's initiative was supported with the capital of first guild merchant, Vali Akhun Yuldashev, who came from the Ili Taranchi. George Guins, a well-known lawyer and politician, wrote in the early 20th century: “the entire economic life of the northern part of the uezd (Zharkent uezd of the Semirechye region) gradually concentrated in his (Yuldashev's) hands” (Guins, 1911). The entrepreneur was actively engaged in the bread trade and was well aware of all advantages resulted from reduced costs of freight to both Semirechye and China.

March 13, 1883 a steamship named “Kolpakovsky” was set afloat. A description of the vessel's technical specifications is preserved: length 56 ft. (approx. 17 m), width 10 ft. (approx. 3 m), stern height 6 ft. (approx. 1.8 m), its load capacity amounted to 800 poods (approx. 12.8 t); the steamship was powered by a 35 hp engine (Poklewski-Koziello, 1885). It was in modern classification, small size vessel that was suitable for trips along Central Asian rivers.

In all probability, there was an agreement between Poklewski and Yuldashev to primarily transport bread and flour. This is evidenced by the fact that it was these products that were transported on the steamship in six trips of the first shipping season (1883) (Ibid.).

To further develop their own steamship company, Poklewski and his partner Yuldashev needed firewood and coal. The latter could be supplied from the fields earlier discovered by Poklewski in Qulja. However, the tense situation in the region forced them to seek an alternative source of coal. Poklewski organized an exploration crew at his own expense and found near the Kalkan mountain rich coal deposits which were an integral part of the Qulja coalfield. Mining engineers, sent there later by order of the Governor-General of the Steppes, confirmed Poklewski's assumption. It offered new prospects for the enhancement of the river transport and mining industry in Central Asia.

Thus, Alfons Poklewski-Koziell and Ivan Poklewski-Koziell as part of the Polish community in Asian Russia, made a significant contribution to the economic development of Siberia and Central Asia. They laid a capitalist foundation of the key industrial and transport sectors in the region.

CONCLUSION

This study focuses on the study of the role played by a Polish family of the Poklewski-Koziells in the

economic development of Asian Russia. Their activities in Siberia and Central Asia facilitated the development of mining, processing of agricultural raw materials, river transport, trade and construction. Sources for this study became materials in archives, newspapers, statistical digests of the Russian Empire and notes of Ivan Poklewski-Koziell.

REFERENCES

- Aadu, M., 2012. Estonians in Siberia. Publishing House of Tartu University, Tallinn, Pages: 752 (In Estonian).
- Goryushkin, L.M. and N.A. Minenko, 1984. Historiography of Siberia of the Pre-October Period (16th-Early 20th Century). Nauka Publication, Novosibirsk, Pages: 317 (In Russian).
- Guins, G., 1911. Taranchi and Dungans (Essays from a trip to Semirechye). Historical Bulletin, No. 8. (In Russian).
- Harrison, J.F., 1971. The Founding of the Russian Empire in Asia and America. Univ. of Miami Press, Miami.
- Kaganovich, A., 2003. Administration's Attitude to the Bukharian Jews and their Legal Status in the Turkestan Krai Between 1867-1917. Publishing House of Jewish University, Jerusalem, Pages: 180 (In Russian).
- Kalmina, L.V., 2003. The Jewish Communities of Eastern Siberia (Mid XIX Century-February 1917). VSGAKI Publication, Ulan-Ude, Pages: 423 (In Russian).
- Kappeler, A., 1992. Russia is a Multinational Empire. Verlag C.H. Beck, Muenchen, Pages: 395.
- Karikh, Y.V., 2004. Interethnic Relations in Western Siberia in the Process of its Economic Reclamation 19th-20th Century. Tomsk University Publishing, Tomsk, Pages: 232 (In Russian).
- Kerner, R.J., 1942. The Urge to the Sea: The Course of Russian History. Wiley, Berkeley, Los Angeles.
- Kijas, A., 2000. Polen in Russia: XVII Century-1917. Publishing House of Instytut Wydawniczy Pax, Warszawa, Poznan, Pages: 402 (In Polish).
- Mariupolsky, A.M., 1995. Wholesale Liquor Trade in Western Siberia (60-80s of the 19th Century). In: Entrepreneurs and Entrepreneurship in Siberia (18th-Early 20th Century), Skubnevsky, V.A. (Ed.). Altai University Publication, Barnaul, pp: 54-74 (In Russian).
- Masyarzh, V., 2002. Migration of Polish Peasants to Siberia in the Late 19th-early 20th Century. Siberia in the History and Culture of the Polish People. Ladomir Publ. Moscow, Pages: 241-245 (In Russian).
- NP., 1863. Essay on the of development of river steamship companies in Western Siberia. Tomsk Provincial Gazette No. 22. Makushin Publ, Tomsk, pp: 4 (In Russian).
- Olferev, S., 1899. Siberia: An Essay on the Conquest and Development of Siberia. Somov Publication, Moscow, Pages: 115 (In Russian).
- Orlov, P.A., 1900. Guide to Factories and Plants in Border Regions of Russia: The Kingdom of Poland, the Caucasus, Siberia and the Central Asian Lands: Materials for Factory Statistics. Kirshbaum Publication, St. Petersburg, Pages: 261 (In Russian).
- Poklewski-Koziello, I.I., 1885. A New Trade Route from the Irtysh to Verny and Qulja and Exploration of the Ili River Aboard the Kolpakovsky Steamship. Shemetkin Publication, St. Petersburg, Pages: 40 (In Russian).
- Shaيدurov, V., 2014. On the emerging Polish Diaspora and its development in Siberia in the first half of the 19th century. Middle-East J. Scient. Res., 14: 251-257.
- Shaيدurov, V.N., 2013. Jews, Germans, Poles in Western Siberia in the 19-20th Century. Nevsky Institute of Language and Culture Publ., St. Petersburg, Pages: 260 (In Russian).
- Skubnevsky, V.A., 2001. Entrepreneurial Activities of Poles in SIBERIA. Second Half of the 19th-Early 20th Centuries. Entrepreneurs and Entrepreneurship in Siberia, No. 3. Altai Univ Publ. Barnaul, Pages: 139-152 (In Russian).
- Skubnevsky, V.A., 2010. [German free entrepreneurship in the Altai in the second half of 19th and early 20th centuries]. The News of Altai State University, No. 3-4, Pages: 198-202 (In Russian).
- Sumner, B.H., 1947. Survey of Russian History. Duckworth, New York.
- Yadrintsev, N.M., 1982. Siberia as a Colony. Stasyulevich Publication, St. Petersburg, Pages: 74 (In Russian).
- Zuev, A.S., 1999. Nature of Annexation of Siberia in the Latest National Historiography. Eurasia: Cultural Heritage of Ancient Civilizations. Nauka Publication, Novosibirsk, pp: 124-136 (In Russian).