Urbanization and the Emergence of Small Towns: Rural Urban Transformations and the Formation of Urban Vernacular Settlements in East Kazakhstan

Altyn S. Ualtayeva[1], Aida S. Margulan[2], Timur A. Apendiyev[3], Olzhas U. Berkinbayev[4] & Emir D. Sain[5]
[1,2,3] Ch. Valikhanov Institute of History and Ethnology, Almaty, Kazakhstan
[4,5] Al-Farabi Kazakh National University, Almaty, Kazakhstan
Email: aida.1@mail.ru

Received	Accepted	Published
19.01.2024	26.06.2024	30.06.2024

https://doi.org/10.61275/ISVSej-2024-11-06-06

Abstract

Urbanization is a global phenomenon and is influenced by complex processes in the society. In Kazakhstan, the formation of towns was based on the implementation of a policy of the Russian Empire, which put in motion the processes of urbanization there. This policy was later continued in the Soviet times too. It began with the discovery of rich deposits of minerals on the sites of small Kazakh vernacular settlements, and their extraction. Gradually, these settlements turned into towns: infrastructure was built; population increased. Invariably, the living conditions of people engaged in industrial production also improved. However, at the end of the 20th century, these small towns are still experiencing a deep social and economic crisis. Although the modern independent Kazakhstan has begun to address them, this issue is still urgent.

This paper examines the process of the formation of urban vernacular settlements in Kazakhstan with a case study of East Kazakhstan. The research employs archival documents containing objective information. It uses comparative historical analysis to identify the causes and reveal the processes of transformation of vernacular settlements into towns.

It concludes that the emergence of some settlements in East Kazakhstan has been associated with the colonial policy of the Russian Empire. The towns are an important and inevitable part of urbanization. It is easier for the migrants and the villagers to adapt to the towns. This is because towns lack tensions and survival problems of the big cities, but retain all of their symbols and infrastructure.

Keywords: Small towns, vernacular settlements, East Kazakhstan, industrialization, development, XIX-XX centuries.

Introduction

Around the world, considerable attention is paid to the study of urbanization processes in the context of modernizing societies. Undeniably, urban development research should be based on reliable information about such urbanization processes. In fact, scientific knowledge of modern urbanization processes is impossible without historical underpinnings. In this regard, studying cities and urbanization processes is of increasing importance.

In Kazakhstan, the formation of towns has been spearheaded by the implementation of a policy of the Russian Empire, which has led to the processes of urbanization. It began with the discovery of rich deposits of minerals in small Kazakh vernacular settlements, and their extraction. Gradually, people moved into work in them and the settlements began to turn into towns. Needless to say, the infrastructure was built and the population increased. Invariably, the living conditions of people engaged in industrial production improved. This policy was later continued in the Soviet times too and has been the underlying force of urbanization.

This paper examines the issue of the rural urban transformations and the formation of urban vernacular settlements in East Kazakhstan arising from urbanization. Its aim is to reveal the formation processes and the dynamics of the transformations of vernacular settlements into towns.

Its objectives are:

1) To trace the process of intensive developments of the territory and its settlements.
2) To identify the economic processes of industrial construction and changes in the social life of the settlers.
3) To identify the main characteristics of the process of starting the systematization of population registration.
4) To establish the current status of the evolution of the towns.

The study of town development is of considerable value for understanding the processes that are taking place in the Kazakh society. It is envisaged that it may contribute to the implementation of a balanced social and demographic policy in the republic, thus resulting in fruitful and healthy communities.

Theoretical Framework

Weber (1991) plays an important role in understanding the essence of a town. He points out the difference between the economic concept of a city and its political and administrative concept, because “in the political and administrative sense, a city can also be considered a settlement that, by its economic nature, could not claim such a name” (Weber,1991: 317).

Braudel (1986) add to this and says that a city cannot exist without the division of labor, without a market, power and exchange. He considers the city as a complex social organism that should be studied together with the surrounding territory. Braudel (1986) commenting on the “hierarchy of cities”, argues that the logical appearance of towns at a certain distance from large centers are important for understanding the place of a city in the settlement structure.

The problem of a town as an independent object of study originates in Western European medieval studies at the beginning of the twentieth century. One of the first works dedicated to towns is the article by the German historian Zimmel (2018) who comments on the psychology and spiritual life of the residents of cities and towns.

However, K. Marx was the first person who gave an idea of a city as an integral organism, thereby, in fact, laying a systematic approach to its study. K. Marx and Friedrich Engels believed that the separation of industrial and commercial labour from agricultural labour is a prerequisite for the transformation of rural areas into the urban ones. According to them, an industrial city begins to act as an important element of the historical process, a stage of class conflicts, a reflection of the capitalist mode of production, and a center of new technologies. (Marx & Engels, 1961: 217)

The interests and values of urban society are an indicator of civilizational development. Civilization seems to be the highest degree of cultural development, but after the growth of all social indicators, a decline occurs. (Spengler, 1991)

Ricardo has studied the phenomenon of urbanization and the evolution of cities from the pre-industrial to the post-industrial period. He has studied the role of government structures at different levels, as well as the influence of economics, politics, and urban landscape on the cultural-generating factor of urban development (Ricardo, 1817). Similarly, the research of scientists from the Chicago school examines the processes of the emergence of towns. Park and Burgess explain the transformation of villages into cities by migration to them, as well as through the lens of social adaptation of ethnic groups. They srgue that the study of the city cannot be carried out in isolation from the individual. Urbanization and socialization of people are influenced by living conditions, including comfortable infrastructure. (Park & Burgess, 1921) In contrast, Thomas and Znaniecki suggest that the growth of the urban population depends on the values of individuals, which should coincide with the group values. (Thomas, & Znaniecki, 1918)

Interestingly however, it is only Fairey and Hawley who focus on ethnic background and the role of culture. Nikolaev & Efremenko, (2015) add and argue that while the reality of megacities is focused on the global economy, the reality of towns, villages and districts is focused on traditions. This paper derives its inspirations and the theoretical underpinnings from these revealings.

Review of Literature

During the Soviet period, scientists have been actively engaged in the study of the formation of towns. The greatest contribution to the development of this has been made by generalizing works. Konstantinov (1966) argues that the size of a city depends on its economic functions and the major employer. Konstantinov (1966) says that “the size of a town and its population determine the nature and scale of national economic functions”. Davidovich (1956) applying a comprehensive analysis to the cost–effectiveness of planned solutions suggests that the size of a city’s territory depends on its population. He also stresses the importance of changing the lifestyle of citizens in accordance with the characteristics of urban development and land improvement, increase in its size, the types of commercial transport, and the system of cultural and community service institutions (Davidovich, 1956).

On the other hand, Iskakov (1992) establishes a typology and classification of cities and their role in the development and placement of productive forces. Similarly, Koshanov & Aidarkhanov (1992) offer an economic analysis of the development of towns in the context of their transition to market relations.

The problems of resettlement from rural areas to towns and the transformation of villages into towns on the basis of industrial growth have intensively occured in Kazakhstan. In this context, Asylbekov & Galiev (1991) offer a conceptual approach to the correlation between the growth of the number of industrial workers and the development of urbanization processes. They argue that the socio-economic and demographic development of the republic is an integral and multi-faceted process. It is industrial enterprises in towns that are the centers of attraction for villagers and migrants. Alekseenko (1993) provides demographics of the population of towns and the occupation of their residents over a long period of time from 1920-1990.

Many researchers have examined the problems of transformations of cities of the republic. In fact, histories of many cities of Kazhkhstan exist. For example, Atyrau (Tabyldiev, 1973), Karaganda (Ivanenko, 1973), Taraz (Abdrasilova, 1981), Kostanay (Yelagin, 1979), Oral (Gerasimova, 1969), Semey (Kyrykbaeva, 2001), Aktau (Kuzutbaeva, 2001), Astana (Alpyspaeva, 1997), Pavlodar (Nurbaev, 1998), and Aktobe (Nurgalymova, 1994) have studied them from the moment of their foundation. These show the process of formation of regional cities and describe their economic orientation. According to them, the reasons for the growth of the urban population is due to the migration of villagers in search of work. Their labor has been immensely useful in the towns. In fact, specialists have come from the other republics to work at the industrial facilities mushrooming there. They point out that developing cities, availability of jobs, functioning hospitals, availability of post-secondary and higher educational institutions, and other symbols of urban life have attracted people to these small towns.

Nevertheless, many issues remain unexplored. Most of the above works are aimed at studying the general characteristics of the growth of cities in Kazakhstan. The issues of urbanization are studied superficially or without reference to the place. At the same time, the history of town formation in Eastern Kazakhstan has not been comprehensively studied and analyzed. In terms of the growth and development of towns, the region has hardly been studied. In previous studies, a socio-demographic analysis of the population of the formed cities has been carried out, and there is no prehistory, since, perhaps, these studies have been made not by historians but by sociologists. However, for a deeper analysis, it is necessary to know all the processes that have taken place in the past.

Research Methodology

This research employs historicism as a research paradigm. It examines the process of emergence and the trends of subsequent developments of towns in East Kazakhstan. It primarily employs a document survey: archival materials using a comparative analysis. It thus identifies the cause-and-effect relationships of the formation of the towns. A logical chain of features of their development in the context of certain historical events has been built. Simultaneously, socio-economic and demographic changes have also been recorded. The formation of specific features of settlements has been traced.

Based on induction, historical facts of the formation of towns have been established identifying general patterns of their further development.

Document Survey

This study examines the key documents kept in the State Archive of East Kazakhstan region: fund No. 50. It provides information about the number of students of the Ridder factory school, renaming of the city, and the daily life of the first miners. There is also valuable information about the arrival of Russian troops in the territory of Zaisan, quantitative indicators of the city's population, and the occupation of its inhabitants.

Information about the ethnic composition of the inhabitants at the end of the XIX century are found in the fund No. 386. In the fund No. 444, important documents have been found on declaring the Kazakh mines as the private property of the Russian emperors introducing the military feudal regime. Materials about the daily life of workers and their family members, expenses and wages are kept in the fund No. 1. The fund No. 6 includes materials about intensive settlement of Russian peasants in the areas adjacent to the Zyryanovsky mine. Information about awarding Ridder the status of a town is kept in the fund No. 1109.

Another important document is the materials of the Complete Collection of the Laws of the Russian Empire, the originals of which are kept in the State Archive of the Russian Federation. They contain a lot of statistical data on the population of cities in East Kazakhstan, the number of workers, the number of students of mining schools, and the educational process. The plans for the construction of fortresses, urban housing, and socio-cultural facilities by the Tsar government have been found.

The archival documents include the works of the first researchers of East Kazakhstan. In the 5 volumes of his "Collected works," Kazakh scientist Valikhanov has explored 6 cities of East Turkestan in 1858-1865. Travelling through the provinces of the Russian Empire, Pallas has explored the territory of Lake Zaisan in 1863-1864. Ritter has provided information about mountain groups and land on the left side of Irtysh River in 1877. Simmel studies towns and their spiritual life. Michaelis has left important information about mineral deposits in the Zaisan region.

Materials on the modern development of towns have been reviewed using the materials of statistical yearbooks and current statistics of East Kazakhstan region. Materials of the population censuses of Kazakhstan, reference books on administrative and territorial division, and other data have been used.

Findings

An important aspect in the study of the problem of the formation of towns is the features of their origin, socio-economic and demographic development. The eastern region of Kazakhstan is now an economically developed part of the republic. Geographically, East Kazakhstan borders on the Russian Federation and the People's Republic of China. It is a strategically important region of the country. On the territory of the Eastern region of the Republic of Kazakhstan, there are large cities of Semey (former Semipalatinsk) and Oskemen. Cities with smaller population include Zaisan, Ayagoz, Ridder, Altai, Shemonaiha, Serebryansk, Shar, and Kurchatov**.** Each of the cities has its own unique history and plays its role in the industrial development of the entire region.

Fig. 1: Villages and Small Towns of East Kazakhstan
Source: Author, 2024

East Kazakhstan has two large cities, Oskemen and Semey, eight towns, and 25 urban-settlements. All these settlements have been founded in ancient times, and some of them have been large oases of the nomads (Levey, 2014) In XV-XVIII, the city of Kengir-Tura, which was part of the Ulytau vilayat of the Kazakh Khanate, was located on the site of the future Oskemen. The Naiman and Kerey tribes lived in this medieval city. The city of Semipalatinsk was founded on the place of an old settlement where Dzungarian Kalmyks, Kokandians, Bukharians, and Tashkent residents met and traded. On this side there was a well-known road along which the Dzungarian Kalmyks began attacking the Kazakhs and taking their cattle. (Levey, 2014) When the Kazakh Khans asked the Russian Empire for help, Russian Emperor Peter I issued a decree on the protection of the eastern lands from the Dzungarian tribes and the beginning of the construction of the Irtysh fortifications. The Emperor built strong Irtysh fortresses, Semipalatnaya (1718) and Ust-Kamennaya (1720). (Kontev, 2016)

In accordance with the above-mentioned historical data, the ways and means of the emergence of large cities of Eastern Kazakhstan, Oskemen and Semey, have been identified**.** Border settlements have become military forts which have later grown and have been transformed into cities. That is, military fortifications have been built on the site of the settlements founded in the Middle Ages under the Kazakh Khanate in order to protect the lands

from the Dzungarian troops. The stone fortresses have been defended by Russian troops from the attack of the Dzungars. (Razdykov, 2005)

The settlements of East Kazakhstan, Zaisan and Ayagoz have turned into cities. The city of Zaisan was a small settlement of Dzhemeneika until 1830. (Kasymbayev, J.K., 1990) This settlement was named after the Zhemeney River, which flowed nearby along the Saur Mountains and discharged into the Zaisan basin. Later, numerous travelers began calling this area Zaisan. In 1864, the corner stone of the city of Zaisan was laid by the Russian Empire. Under the leadership of Colonel I. F. Babkov, the stanitsa was strengthened by military units. A customs point at the border to China was built soon. The export of wool, fur, timber and other raw materials to China began. The imports included fabrics, clothes and handicrafts. (Cohen, 1998)

Long before that, at the beginning of the XVIII century, the Tsar government took a number of measures to strengthen the new state borders. Russia began the construction of the Irtysh fortified line, which extended all the way to the Southern Altai. Fulfilling the decree of Peter I, Siberian governor M. Gagarin in 1718 ordered Ivan Kalmykov to go up the Irtysh River to Lake Zaisan in order to collect the necessary information. Kalmykov was given a small detachment, and volunteers from among the prisoners held in the Tobolsk prison were recruited to reinforce him. Ivan Kalmykov reached the lake in two weeks without being delayed by the Dzungars, examined it, and returned safely SAERK (1718).

Zaisan was founded in 1864 as a military post on the site of another settlement of Zhemeney, which was located along the caravan route (towards Semipalatinsk). In 1718, a new expedition led by Urasov and Somov was sent from the Yamyshevsky fortress to explore Lake Zaisan in more detail. In May 1720, the detachment of I. Likharev, who was appointed by Peter I as the head of the newly organized expedition, safely reached the lake to fulfill the imperial decree of January 16, 1719. “Go to Lake Zaisan... build a fortress.” In this regard, he wrote to the Senate: “… fearing this, so as not to miss a convenient time for the campaign, this May I sailed from Tobolsk to Zaisan Lake by three light vessels together with the staff, a company officer, a sub-officer, a soldier, artillery men, and 189 non-officers…” SAERK (1720). The summer was dry; there was less water in the Irtysh than usual, so Likharev decided to go up the river by flat-bottom boats. These boats got the name “zaisanka” in memory of the voyage. In the middle of the XIX century, infantry general I.F. Babkov, who was the military governor of the Zaisan region, founded the city of Zaisan instead of the fortress. At the same time, the first Russian and Ukrainian immigrants came here.

In 1864, the Zaisan post was founded, which protected the border of the Russian Empire. Later, a customs office was founded, through which trade with China and Mongolia was conducted. In 1868, to manage the Cossack population, the Zaisan county was created. “The county had three Cossack villages and two Cossack volosts with a total population of 66 thousand people of both sexes” Soap-making, leather, brewing and other enterprises began to develop. Brick houses and shops with the architecture typical of that time were built. The imperial institutions of Zaisan included the county administration, the treasury, the forestry, the postal and telegraph office, etc. The telegraph connecting the settlement with Semipalatinsk was laid in 1886. In connection with the expansion, in 1875 the county was transformed into the Zaisan district of the Semipalatinsk region. At the end of the XIX century, it was a small provincial town with low houses without roofs. In 1894, Zaisan became an urban settlement. Ditches were dug along the alleys and streets. Thanks to them, many trees were planted, and soon the city was buried in verdure. Later, people began cultivating grapes here. The population of the city, consisting of Russians, Kazakhs and Tatars, was mainly engaged in agriculture and cattle breeding SAERK (1894). Some residents of the city were driven by need to the gold mines, where they went in early spring and returned home in late autumn. Many of the Zaisan residents went to earn money at the coal mines located in the vicinity of the city, where brown coal was broken. For this work, they were paid mere pennies. The Cossacks of the Cossack regiment quartered here were engaged in fishing on the lake.

For a long time, the town played an important role in Russia's trade with China and Mongolia. Herds of cattle were driven through Zaisan; textiles, kerosene, tea, sugar, dishes, and other goods were transported. Trade was controlled through the customs, where caravans coming

from abroad were inspected. By the end of the XIX century, the role of the settlement as a trading city decreased a bit, but with the development of steam navigation in the upper reaches of the Irtysh River it increased again. The expansion of international relations with China influenced the growth and development of the urban population of Zaisan.

The foundation of the city of Ayagoz began in 1770, when 137 Cossacks were transferred to a local settlement near the Ayagoz River, who founded the stanitsa of Ayaguzskaya. Later, it was renamed Sergiopolskaya. In the 40s of the XIX century, the importance of the Ayaguz (Sergiopolsky) and Kokpektinsky inner districts increased. A. Yanushkevich, a Polish traveler who visited the Kazakh steppe in 1846 as part of the expedition of Major General N.F. Vishnevsky, wrote the following in this regard: "…The increasingly expanding trade with Chuguchak and the hope of finding a safer road to Kuldzha for caravans…speaks well for the fact that the name "Ayaguz," which is now unknown in Europe, will someday cross the borders of Siberia" (Andreevsky, 1891).

The foundation of today's Ayagoz started in 1831 under the rule of Khan Sameke. In 1860, Ayagoz was renamed the city of Sergiopol. In 1874, a new decree was adopted with regard to those who moved to Sergiopol, and in 1880 it was transformed into a stanitsa (Andreevsky, 1891). In 1847, there were 170 houses and 768 people. Tatars and Kazakhs lived in the Tatar sloboda. Sergiopol was one of the seven districts of the Kazakh steppe and played an important role in the development of trade relations between Russia and China. In order to stimulate the resettlement of merchants and citizens to Ayagoz, Kokpety and Kopal, in 1859, a law was adopted on benefits for those who moved to these settlements.

The growth and development of the small town of Ayaguz in the XX century was influenced by the construction and development of the Turkestan-Siberian Railway. To construct this railway, industrial enterprises were built. The industrial center attracted labor force. The population of the city of Ayaguz began increasing. Living conditions began improving. That is, compared to Zaisan, Ayaguz did not play the role of a border post. The city of Ayagoz has become an industrial and transport center of East Kazakhstan.

Those villages and towns near which mineral deposits were found became interesting to the tsarist government of the Russian Empire (the cities of Ridder and Altai). The construction of the Upper Irtysh fortresses in the first quarter of the XVIII century created conditions for exploring the depths of the Altai. In 1786, mining engineer Philip Ridder discovered a rich deposit of polymetallic ores. The mine was named after the discoverer – Riddersky. Later, Kryukovsky, Sokolsky and Sugatovsky mines were created, which formed a group of mines. This is how the first Ridder settlement was founded**.**

The mines were declared the private property of the Russian emperors by an imperial decree. The key management of the Kolyvan-Voskresensky and Nerchinsky factories was assigned to the Cabinet of Her Imperial Majesty. A special "decree" on the management of these factories adopted in 1828 imposed the military feudal regime. In 1830, the Altai mines were managed by the Department of Mining and Salt Affairs of the Ministry of Finance, and in 1855 - again by the Cabinet. But the Russian emperor was still the owner of the Altai resources. Mining enterprises generated huge profits. During the 34 years of her reign (1762-1796) alone, Catherine II received 40 million rubles from the Kolyvan-Voskresensky silver and gold factories in the prices of that time (Semevsky, 1901).

In February 1914, the former manager of the Ministry of Trade, M.M. Fedorov, and V.V. Romanov, a nobleman by birth, leased Ridder polymetallic deposits and received the right to develop minerals in the Ulba River basin on an area of 360 thousand square versts for a period of 36 years, i.e. until January 1, 1950.

In October 1924, the cyalis plant was put into operation. In a short time, a lead plant was built, where, in November 1927, the first 27 pounds of silver lead were smelted. As a result of the reconstruction, by the beginning of the first five-year plan, Ridder became an operating industrial facility of the country. Its productive capacities, energy base, and transport have expanded. In 1926, the enrichment plant was put into operation. (Chernyshev, 1988)

The industrial development of the city was greatly facilitated by the launch of the Ulbinskaya hydroelectric power plant and the commissioning of the Rubtsovka-Ridder railway.

In 1927, Ridder was transformed into an urban-type settlement. In 1934, it acquired the status of a city with more than 27 thousand residents SAERK (1934) In February 1941, Ridder was renamed Leninogorsk. In 1966, the operating zinc plant was put into operation.

By the Decree of the President of the Republic of Kazakhstan dated July 28, 2002, the historical name Ridder was returned to the city. The administrative center of Leninogorsk district includes a settlement district and a suburban rural district (19 settlements and villages). Ridder district has significant reserves of mineral resources, the main of which are polymetallic ores containing zinc, copper, and noble metals. The current state of the city's economy is determined by the basic branches of non-ferrous metallurgy and the mining industry. They are represented by Ridder Mining and Processing Plant, zinc plant, etc.

The vast majority of towns in Kazakhstan serves as centers of administrative districts and plays an important organizing role. The city of Altai (Zyryanovsk) in East Kazakhstan is one of them.

Reconnaissance detachments discovered many polymetal deposits and founded new mines: Sosnovsky (1760), Nikolaevsky (1761), Cherepanovsky (1780), Salairsky (1781), Bukhtarminsky (1784), Petrovsky and Titovsky (1787), Grekhovsky and Surgatovsky (1791). In 1789, the Kolyvan-Voskresensk mining authorities became focused on the Bukhtarma deposit discovered several years ago. A. Litvinov, an assistant mining foreman, was instructed by the head of the Loktevsky plant, V.S. Chulkov, to find ancient mines "higher up the Bukhtarma River, down the current, at the discharge of the Berezovka River on the left side." Kutin, a peasant from the village of Vydrykhi, pointed to ancient mines in that area, but Litvinov did not take samples of rocks, having considered the deposit "unworthy of attention" SAERK (1791).

In the early 60s of the XVIII century, intensive and large-scale extraction of rich oxidized ores led to the processing of reserves in the upper part of the Zmeinogorsky deposit, which was not explored into the depths. In this regard, the reduction of silver smelting at Altai factories began. The first inhabitants who founded Zyryanovsky placer in 1791, which later became a mine, were 23 miners from Kolyvanovo-Voskresensk factories. They lived in huts and dugouts and mined the first tons of rich silver ore SAERK (1791). It was the settlement of Zyryanovsk that was founded on the site of the mine.

After 1796, intensive settlement of the areas adjacent to the Zyryanovsky mine by peasants "assigned to the Altai mines and factories" began. The villages of Snegirevo, Solovyovo, Turgusun, Krestovka, Kondratievka (Talovka), Parygino (Bobrovka), Bogatyrevo (Osochikha) and other settlements appeared in the valley of the Bukhtarma River SAERK (1796).

The composition of manufacturing workers in the first half of the XIX century has been studied by V.V. Romanov, and it has been found out that " of the 1718 registered in the forms of 1856, 953 (56.0%) were hereditary artisans, 556 (32.0%) were recruited from among peasants, 20 (1,0%) – from other classes, and 189 (11,0%) were engaged in taskwork, of which 137 (8,0%) were hereditary peasants, and 52 (3,0%) – artisans". That is, half of the workers were recruited, which contributed to the military regulation of labor. Especially difficult and dangerous was the work of the borers, who worked in the faces in small artels of four people in two shifts, day and night. One week they worked from 5 a.m. to 5 p.m., and the other week – from 5 p.m. to 5 a.m. The third week was free. In 1859, the village of Zyryanovskoye had 448 inhabitants (Ritter & Semenov-Tyan-Shanskii, 1877).

In 1891, the Zyryanovsky mine had 8 mines, 2 steam engines, 3 water–filling wheels, 4 stamps, and 14 gold washers for extracting gold. 593 people worked underground, 444 - on the surface. The settlement of Zyryanovskoye had 360 households and 5600 inhabitants (Arsenyev, 1916).

At the beginning of the XIX century, the works on exploring new deposits were carried out in the area of the mine. The following deposits were discovered: Murzintsevskoye (1813), Maleevskoye (1810), Saznaevskoye (1811), Moskvinskoye (1820) (Tyzhnov, 1907). In 1822, the first industrial hydroelectric power plant at the Zyryanovsky mine equipped with French equipment was built and put into operation on River Berezovka under the supervision of mining engineer N.I. Koksharov. Electric power was used for the mine drainage, ore crusher, cable railway, lighting of the factory, workshops, and the settlement.

By the early 90s of the XIX century, the mine's reserves of rich silver ores had sharply decreased. In March 1897, the mine was leased for a period of 60 years to the Russian-French capitalists who established Zyryanovsky Mining Company. In March 1902, the construction of the Turgusun hydroelectric power plant was completed. The lack of funds to complete the reconstruction of the mine and continue the production forced Zyryanovsky Mining Company to terminate the lease agreement.

In September 1910, the Cabinet leased the mine to the Austrian concession, which in July 1914 transferred the rights and obligations to the English company "Russian Mining Corporation". After the revolution, in 1918, the Company stopped the operation, and the mine was conserved until the 1920s.

The State Bank of the USSR took control of the enterprise. In March 1937, by the decree of the Central Executive Committee of the Kazakh SSR, Zyryanovsk was classified as a workers' settlement, and in January 1941 it received the status of a city.

The intensive development of the city took place in the 1940s and 1950s. During the Great Patriotic War, Zyryanovsk was providing defense enterprises with uninterrupted supply of lead and other non-ferrous metals. In March 1950, the Council of Ministers of the USSR adopted the resolution "On measures for the development of industry in 1950-1955." It provided for the construction of a large ore mining and processing enterprise at the premises of the Zyryanovsky deposit and the construction of the Zyryanovsk-Ust-Kamenogorsk railway. In 1952, Zyryanovskoye ore administration was transformed into the lead and zinc plant, the first stage of which reached its projected capacity in 1959. The construction program of Big Zyryanovsk mainly provided for the plant development and the construction of housing and socio-cultural facilities SAERK (1952).

Modern Zyryanovsk is one of the centers of non–ferrous metallurgy of the republic. The mining complex engaged in the extraction and enrichment of lead-zinc ore is part of the Kazzinc concern. Zyryanovsk is the administrative center of the Zyryanovsky city akimat, which unites 52 adjacent settlements.

Agriculture was actively developing in the other city of East Kazakhstan, Shemonaikha. It was founded as a settlement in 1765. The village of Shemonaikha was part of the Altai mining district. According to some historical sources, the "Polish" village of Shemonaikha was founded in 1765, according to the other ones - in 1769 on the site of a Cossack redoubt or next to it. Only one thing is undoubted: the emergence of this settlement was associated with the need to build Yamyshevskaya, Semipalatinsk, Ust-Kamenogorsk and other fortresses (1715-1720) with the subsequent construction of intermediate outposts, redoubts and lighthouses, which would be the starting point for the settlement of migrating peasants. Russian Old Believers, who fled religious persecution to Poland (hence the name "Pole"), began to settle in the Rudny Altai after a government decree of 1762 inviting Russian "Poles" to return to their homeland SAERK (1765). According to the lists of names of the population and the audit lists of the fifth audit as of 1795, 103 men and 113 women, 216 people of both sexes, were registered in the village of Shemonaikha. If we assume that the families of that time included 8-10 people, the village consisted of 20-25 households. By the end of the XIX century, the number of households and the population in "Polish" villages had grown: in 1887, 3787 people lived in Shemonaikha.

Meanwhile, year by year, the village expanded, was developed, and its population increased (Venyukov, 1873). In 1930, Shemonaikha became the administrative center of the district bearing the same name. The district has deposits of polymetallic ores that contain copper, zinc, lead, and gold. The basic industries of the city that are currently developing are agriculture and mining (Potanin, 1871).

This city with the name of Serebryansk became famous in the early sixties, when in 1953 the construction of the Bukhtarma hydroelectric power plant, quite large at that time, began. Serebryansk received the status of a city in 1962. Leading enterprises: Bukhtarma hydropower complex of JSC Kazzinc; CJSC Serebryansky plant of inorganic productions, which manufactures filter materials and plastic products; Serebryansk railway division, engaged in maintenance and repair of the railway track ("Kazakhstan Temir Joly"). The residents are trying

to help themselves and the city to get out of a depressed state: private business is developing, livestock population is increasing, and workshops at enterprises are starting to open.

Foundation of Shar

Shar (Charsk) was founded in 1927 as a railway station and a workers' settlement in connection with the construction and commissioning of the Turkestan-Siberian Railway (Pallas, 1788). During the Great Patriotic War, it was one of the important transport hubs ensuring communication between the front and the rear.

Currently, it is a transport hub with the rolling stock repair company. Shar is the name of the city in the new transcription, but many people still call it Charsk. Until July 1997, it has been a district center with a population of more than 10 thousand people. Having lost its status, it has begun to decline.

The railway station and the locomotive depot with all the related services remain the center of today's life in Shar. About a thousand people work here. Railway workers help their city as much as they can. In 2005, the construction of the Oskemen-Shar branch line has begun, which will significantly improve the transport connection of the regional center with other regions of the republic. Shar will become a hub station, allowing the town getting out of a depressed state.

Foundation of Kurchatov

Kurchatov, founded on August 21, 1949, differs in its history and functionality from other towns in East Kazakhstan. It was named after Igor Vasilyevich Kurchatov (1902-1960), a physicist, the first organizer and head of work on atomic science and technology in the USSR, the founder and, from 1943 to 1960, the first director of the Institute of Atomic Energy in the town. Together with the staff, he was developing nuclear isomerism. In August 1947, by the decision of the Council of Ministers of the USSR, an atomic testing site under the conditional name "Training ground No. 2" was created 140 km far from the city of Semipalatinsk. Simultaneously with the creation of the nuclear test site, the construction of the M site for a residential and administrative center was started. After the construction was completed, the object was called the Konechnaya station, and in 1974, the settlement was named the town of Kurchatov. For postal items, it was called Semipalatinsk-21. It was impossible to find this name on any geographical map of that time. The town was fenced with two rows of barbed wire and divided into a number of sections consisting of highly classified research institutes and pilot plants that serviced the site (Sergazina & Balmukhanov, 2000)

Until August 29, 1991, Kurchatov was the site of nuclear tests. It had nuclear reactors and temporary spent fuel repositories. As a result of 354 explosions carried out in 1949-1991, approximately 1/3 of the territory of East Kazakhstan has areas with an established high radioactivity of 137 Cs (cesium). Almost all water sources are contaminated with high levels of radionuclides. Until the mid-1980s, any information about the town and its residents was secret and could not be published.

In 1991, by the decree of the President of the Republic of Kazakhstan, the test site was closed. The sharp reduction in funding had a significant impact not only on the budget of the institutions, but also on every family, and the town could vanish. By a new decree of the Head of State of May 1992, the National Nuclear Center was founded on the basis of the scientific potential of the test site.

The first results appeared over time. The turning point was reached only in 1996: the outflow of intellectual staff stopped, a core of enthusiastic specialists appeared, and the first small contracts were concluded. Gradually, serious projects were launched: studying the effects of nuclear tests on the flora, fauna and health of the inhabitants, studying the safety of nuclear reactors for a new generation of nuclear power plants, as well as monitoring nuclear weapon tests and unauthorized nuclear explosions at test sites in other countries. The National Nuclear Center headed by its CEO, Doctor of Sciences Yu. Cherepnin, is seriously developing its scientific activities, expanding international contracts, and has become one of the most important scientific

centers of the republic. Graduates of Oskemen and Semipalatinsk universities join the staff of the center.

The administrative unit of an urban-type settlement (workers' settlement) appeared in Soviet times. As of January 1, 1989, there were 210 workers' settlements among the administrative and territorial units of the Republic of Kazakhstan. There were 33 workers' settlements in East Kazakhstan, or 15,7% of their total number in the republic. The region ranked first in terms of the number of workers' settlements. By 1999, their number in the republic decreased to 200, and in East Kazakhstan – to 30. Karaganda region got the first place in terms of the number of workers' settlements. Yubileyny, Palattsy, Putintsevo, etc. lost the status of workers' settlements. As of January 1, 2007, the number of urban-type settlements decreased to 25. (Uvaliyev et al., 2020)

Discussion

Formation of towns in Kazakhstan has been caused by various factors. Most of them are located on the sites of ancient settlements of Kazakh tribes. There are ancient monuments of Kazakh culture near these settlements, such as the mausoleum of Kozy-Korpesh and Bayan-Sulu, which has been studied by the Kazakh democrat and Ch.Ch. Valikhanov (Valikhanov, 1985). A more detailed history of this land in the V century AD is described by the sage Kurbangali Khalit in the book "Tauarikh Khamsa" published in 1905.

However, each city in East Kazakhstan had its own history and function. As mentioned earlier, military fortifications have been built by the Russian Empire in the large cities of Oskemen and Semey. The fortresses have been protected by Russian troops from the attacks of the Dzungarian troops coming from Mongolia. Later, they became the cultural, as well as industrial and economic centers of the region. These fortresses were founded at the same time, simultaneously with other fortresses of the Irtysh military line. (Kontev, 2016)

The city of Pavlodar in Pavlodar region of the Republic of Kazakhstan was founded in 1720 according to the same principle. In 1725, the St. Peter's fortress was built in North Kazakhstan region, and the city of Petropavlovsk was founded. (Apollova, 1976)

The towns of Ayaguz and Zaisan were also important for the region. Both towns were also founded near Kazakh settlements, near the rivers and natural oases of East Kazakhstan. Only after the arrival of the Russian Empire, in the XIX century Zaisan turned into a border outpost built near the border to China. Trade with the neighboring country was carried out through the Zaisan border line. That is, population growth and urbanization processes in Zaisan were due to good neighborly relations with China. The formation of Ayaguz and growth of its population started only in the XX century after the construction of the Turkestan-Siberian Railway. Ayaguz became an industrial and transport center of the region, providing railway connections with other regions of the Republic. Another similar town was Shar. It was named after the Shar River. Currently, there is also a railway station of Kazakhstan Railways. And it was the development of railways that contributed to the development of the town of Shar.

The town of Shalkar located in the west of the Republic of Kazakhstan, in Aktobe region, has a developed railway. This town has the Shalkar-Beyneu railway, the construction of which has influenced the growth of population and the construction of new infrastructure. (Baishev, (1967)

The towns of Ridder and Altai (Zyryanovsk) were founded after the discovery of mineral deposits and the start of mining works by the Russian Empire. Currently, both towns are the centers of the mining and metallurgical industries of lead, zinc, and precious metals. The major employer of Ridder is Kazzinc LLP (it includes 3 mines, a lead and a zinc plant, a concentration mill, and a mechanical repair plant). The energy sector is represented by the Ridder thermal power plant and the Leninogorsk cascade of the hydroelectric power plant. The town of Altai has a concentrating mill located in the eastern outskirts of the city. Currently, its main purpose is the processing of polymetallic and copper-zinc ores of the Maleevsky deposit. Concentrates of zinc, lead and gold ores are transported in bulk to the metallurgical plant of Oskemen. The town of

Serebryansk has been built in 1952 during the construction of the Bukhtarma HPP, and later became a city of regional subordination.

A similar industrial center in the Republic of Kazakhstan is the city of Atyrau located in West Kazakhstan region. In 1640, the merchant Gury Nazariev built there a wooden prison at the mouth of the Yaika River at its confluence with the Caspian Sea. His children Mikhail, Ivan and Andrey Guryev were the first to begin commercial development of Yaik's fish resources. For a long time, Guriev was a city of fish industrialists. In the XX century, under the Soviet rule, oil deposits were discovered there, and the city began expanding even more. (Mukashev, 2001).

One of the first mentions of the city of Shemonaikha dates back to 1766. It was settled in the XVII century by Polish immigrants. Its first inhabitants were peasants who fled Central Russia because of the unbearable oppression of serfdom and church reforms. The inexhaustible resources of the fertile land and the richness of the subsoil created conditions for establishing powerful enterprises in the fields of agriculture and non-ferrous metallurgy. Until the middle of the XX century, Shemonaikha district was mainly an agricultural area. After the discovery of new deposits of lead and copper and the introduction of new technologies, it received the right to be called a metallurgical center. In the second half of the XX century, the metallurgical industry of Shemonaikha district entered a new stage of development as unique enterprises were built there, including those belonging to the defense industry. Today, the non-ferrous metallurgy of Shemonaikha district is represented by the Artemyevsky production complex and the Nikolaevskaya concentrating mill, which are part of Vostoktsvetmet LLP.

The city of Zharkent in Zhetysu region, just like Shemonaikha, specializes in the manufacture of agricultural products. The cultivation of agricultural crops, seed production, livestock breeding, and meat products are carried out and sold. There are feed lots, and the storage and sale of wheat, soybeans, corn, barley and other crops are organized. (Brophy, 2016)

The town of Kurchatov has been founded in the XX century 45 km far from the test site. The first nuclear bomb was tested there. During the Soviet period, the town was fenced with the barbed wire and closed to the public. It had 20 thousand residents, most of whom were military staff and scientists who worked on the development of the nuclear bomb. The town of Kurchatov and the nuclear test site were located 130 km from the city of Semey. On August 29, 1991, the Semipalatinsk test site was closed and disbanded.

The Republic of Kazakhstan has no analogues of Kurchatov, although Semey has a sister city of Nevada in the USA, which has been functioning since 1951. The yield of the tenth nuclear explosion in the world was one kiloton. The Nevada test site became the main site of nuclear tests in the United States. Underground tests at this test site were carried out until 1992. (Yakubovskaya et al., 2000)

Conclusion

Thus, this study has achieved the tasks originally set by historians and demographers as follows:

1. **The process of intensive development of towns since the beginning of their emergence has revealed.** The towns have been formed on the sites of small nomadic settlements. The impetus for the transformation of rural areas in East Kazakhstan into towns has been distated by the colonial policy of the Russian Empire. Since the beginning of the XX century, the Soviet government has continued the policy of industrialization and collectivization of Kazakhstan, which has further contributed to the growth and development of towns.
2. **The key economic processes of industrial construction and changes in the social life of settlers have been revealed.** At first, border outposts of the Russian Empire have been necessary to protect the state border. Later, with the development of trade and economic relations with China, the outposts have begun transforming into logistics centers. It has had a positive impact on the living conditions and the population of the region. The mining and processing of minerals organized by the Russian Empire have been aimed at its enrichment. Although the richest reserves of minerals have been exported from the Republic

for the needs of the entire Union, villagers from the small villages have continued migrating to the cities for money and better urban living conditions. The villagers, who have lost their land plots and pastures, have gone to industrial enterprises in search of money. The population has been composed of the locals and the Russian peasants resettled by imperial authorities from Central Russia. The military who have served at the outposts have also stayed there.

Later, in the XX century, the population growth was influenced by the construction of the Turkestan-Siberian railway and the Bukhtarma hydroelectric power plant. The well-known Semipalatinsk nuclear test site has required huge human resources, too. Young people from the entire Soviet Union have been sent to the cities of East Kazakhstan that were under construction. People engaged in the development of the nuclear bomb lived in Kurchatov. The settlement was accompanied by powerful ideological migration propaganda and promises of better living and financial conditions.

3. **The key characteristics of the process of starting the systematization of population registration have been determined.** After the creation of the Turkestan Governorate General in Eastern Kazakhstan, Semipalatinsk Region appeared. It included the districts of Semipalatinsk, Ust-Kamenogorsk, Zaisan, and other counties. A retrospective view shows that during the colonization of the region, all military and administrative correspondence was carefully completed. Currently, materials that allow assessing the processes of migration and population growth are stored in the State Archive of the Russian Federation. At the same time, the policy of the Soviet Union is also reflected in archival documents that allow us analyzing the past events. The dynamics of population growth and the development of towns have been recorded in the documents, which are now kept in the State Archive of East Kazakhstan Region, since the early 20-30s of the XX century.
4. **It has established the current state of urban evolution**. The results of the colonial policy of the Russian Empire and the collapse of the USSR have led to a negative manifestation since the 1990s. In fact, they have affected, first of all, the standard of living of the urban population of Eastern Kazakhstan among other aspects.

At the present stage, towns have administrative, territorial and economic functions. Using their internal capabilities, they are gradually coming out of a depressed state and have started turning to a political, economic, as well as social and demographic segment important for an Independent Kazakhstan.

Acknowledgements

The article was prepared as part of the project of grant financing «Cities of Kazakhstan in the 20-30s of the XX century as a socio-cultural phenomenon: ethno-demographic and socio-cultural development» (individual registration number: AP19678056).

References

Abdrasilova, A. (1981) History of the city of Dzhambul (Aulie-Ata) in 1917-1940, Unpublished Ph.D. Thesis, Faculty of History of Kazakhstan, Kirov S.M. Kazakh State University, Kazakhstan.

Alekseenko, A.N. (1993) Population of Kazakhstan 1920-1990. Alma-Ata: Science.

Alpyspaeva, G.A. (1997) Problems of socio-economic and cultural development of the city of Akmola (1832-1914). Almaty: Science.

Andreevsky, I.E. (1891) Ayaguz, the river. Encyclopedic Dictionary. St. Petersburg: Semenovskaya printing house.

Apollova, N.G. (1976) Economic development of the Irtysh region at the end of the XVI – first half of the XIX century. Moscow: Science.

Arsenyev, K.K. (1916) A new encyclopedic dictionary. St. Petersburg: Printing House of The Brockhaus-Efron Joint-Stock Company.
Asylbekov, M.Kh. & Galiev A.B. (1991) Social and demographic processes in Kazakhstan (1917-1980). Alma-Ata: Science.
Baishev, S.B. (1967) The history of the Kazakh SSR: the era of socialism. Alma-Ata: Science.
Braudel, F. (1986) Material civilization, economy and capitalism of the XV-XVIII centuries. Structures of daily life: possible and impossible. Moscow: Progress.
Brophy, D. (2016) Uyghur Nation: Reform and Revolution on the Russia-China Frontier. Cambridge: Harvard University Press.
Chernyshev, V.V. (1988) Leninogorsky polymetallic plant. Alma-Ata: Kazakhstan
Cohen, S.B. (1998) The Columbia Gazetteer of the World. New York: Columbia University Press.
Davidovich, V.G. (1956) On the typology of settlement in groups of cities and towns of the USSR. *Questions of geography*. 38 (1), pp. 27-28.
Gerasimova, E.I. (1969) Uralsk. A historical essay. Alma-Ata: Science.
Iskakov, U.M. (1992) Cities in the settlement system of Kazakhstan (economic and demographic aspect). Alma-Ata: Science.
Ivanenko, A.K. (1973) The history of the formation of the population of the city of Karaganda during the creation of the third coal base of the USSR, Unpublished Ph.D. Thesis, Faculty of History of Kazakhstan, Kirov S.M. Kazakh State University, Kazakhstan.
Kasymbayev, J.K. (1990) Cities of East Kazakhstan in 1861-1917. Alma-Ata: Science
Kontev, A.A. (2016) Formation of armed forces on the Irtysh border line in the mid-1740s. *Bulletin of Kemerovo State University.* 4, pp. 51-55. Available at: https://cyberleninka.ru/article/n/formirovanie-vooruzhennyh-sil-na-irtyshskoy-pogranichnoy-linii-v-seredine-1740-h-gg/viewer
Koshanov, A.K. & Aidarkhanov, M. K. (1992) Towns in the transition to the market (problems and priorities). Almaty: Science.
Konstantinov, O.A. (1966) Dynamics and distribution of towns in the USSR. Leningrad: G.I. Gerzen Leningrad State Pedagogical University
Kuzutbaeva, B.K. (2001) Social and economic development of the city of Aktau (1959-2000) Almaty: Science.
Kyrykbaeva, E.O. (2001) History of the city of Semej: socio-economic and cultural aspects (1946–1990). Almaty: Science.
Levey, B.S. (2014) Jungar Refugees and the Making of Empire on Qing China Kazakh Frontier, 1759-1773, Unpublished Ph.D. Thesis, Faculty of East Asian Languages and Civilizations, Harvard University, USA
Marx, K. & Engels, F. (1961) Essays. Vol. 18. Moscow: State publishing house of political literature.
Nikolaev V.G. & Efremenko D.V., (2015) Chicago Sociology: Collection of Translations. Moskow: Institute of Scientific Information on Social Sciences of the Russian Academy of Sciences.
Nurbaev, K.Zh. (1998) History of the city of Pavlodar (1917–1940) Almaty: Science.
Nurgalymova, K.S. (1994) History of the city of Aktobe (1946–1991), Unpublished Ph.D. Thesis, Faculty of History of Kazakhstan, Al-Farabi Kazakh State University, Kazakhstan.
Mukashev, S. (2001) Chronicles of the city of Atyrau: 1640-2001. Almaty: Art.
Pallas, P.S. (1788) A journey through various provinces of the Russian state. St. Petersburg.: Imperial Academy of Sciences.
Park, R. & Burgess, A. (1921) Introduction to the Science of Sociology. Chicago: University of Chicago Press.
Potanin, G.N. (1871) Winter trip to Lake Zaisan (winter of 1863 – 1864). *Notes of the Russian Geographical Society on General Geography*. 1, pp. 429-462.
Razdykov, S.Z. (2005) Kazakhs of the Right Bank of the Irtysh in the XVIII - first half of the XIX centuries: A socio-economic system, Unpublished Ph.D. Thesis, Faculty of Domestic history, Tomsk State University, Russian Federation.

Ricardo, D. (1817) On the Principles of Political Economy and Taxation. London: John Murray
Ritter, K. & Semenov-Tyan-Shanskii, P.P. (1877) The geography of Asia. St. Petersburg: V. Bezobrazov's printing house.
Spengler, O. (1991) The Decline of the West. New York: Oxford
Semevsky, V.I. (1901) Peasants during the reign of Catherine II. St. Petersburg: printing house of M.M.Stasyulevich
Sergazina, G.M. & Balmukhanov, S.B. (2000) Semipalatinsk nuclear test site: the history of construction and operation. Semipalatinsk: Semipalatinsk State University
Tabyldiev, Kh.B. (1973) The history of socialist Guriev (1917–1937) Unpublished Ph.D. Thesis, Academy of Sciences of the KazSSR: Ch.Ch. Valikhanov Institute of history, archeology and ethnography, Kazakhstan.
Thomas, W. I & Znaniecki F. (1918) The Polish Peasant in Europe and America. Boston: Richard G. Badger.
Tyzhnov, I.I. (1907) Notes on the urban chronicles of Siberia. Barnaul: Typo-Lithography of the Altai District Administration.
Uvaliyev T.O., Uvaliyev M.T. & Mirzaev, E.A. (2020) A brief historical and geographical overview of the administrative and territorial structure of Kazakhstan in the XX century. 2 (27), pp. 4-14. Available at: https://doi.org/10.26577//JGEM.2020.v57.i2.01
Valihanov, Ch.Ch. (1985) Collected works in 5 volumes. Alma-Ata: Main editorial office of the Kazakh Soviet Encyclopedia.
Venyukov, M.I. (1873) Materials for a military review of Russian borders in Asia. *Military collection*, 2, pp. 276-320
Weber, M. (1991) City. Moscow: Progress
Zimmel, G. (2018) Big cities and spiritual life. Moskow: Strelka Press
Yakubovskaya, E.L., Nagibin, V.I. & Suslin V.P. (2000) Semipalatinsk nuclear test site: yesterday, today, tomorrow. Novosibirsk: Union Semipalatinsk LLC.
Yelagin, A.S. (1979) Kustanay: Yesterday, today, tomorrow. Alma-Ata: Science.