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# **RECONSTRUCTION OF COMMERCIAL WAYS AND SILK ROAD IN NURATAU AREA**

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#### Specific Session 9: Cultural heritage recording and Silk Road

KEY WORDS: Cultural heritage, Database, Cartography, GIS, History, Reconstruction

## **ABSTRACT:**

This manuscript is dedicated to history of economical relations and reconstruction of commercial routes on territory of Nuratau from 20 century B.C. till beginning of 20 century. This time interval was conditionally divided onto three periods: before, in time and past of existing the Great Silk Road (GSR). An attempt to reconstruct commercial routes in the region based on analysis of more than 300 bibliographical and 14 cartographical sources (4 of which are old maps) and use of historic-geographical GIS approach is made. That work resulted an electronic dB (semantical and narrative) on history and commercial relations of Nuratau area. A thematic GIS on history of economical development of the area in question was worked out. DEM showing an unique location of Nuratau territory as main transit centre of GSR was created. Role of the studied territory in history of development of economical and cultural relations between Siberia, Volga sides, China, Persia, India, Afghanistan and Kazakhstan.

### 1. INTRODUCTION

#### Motivation

A desire to draw an attention of the scientific public at large to a history of development of Nuratau area became one of the motives of the work presented. Actually, the area has a many thousand years old history of development of trade-economical activity. But the main motive was a desire to demonstrate possibilities of unique potential of the area for transit commercial traffic. "A trade is always carried out by the same roads" - told Y.K. Meyendorf at beginning of 19 century (Meyendorf, 1975). So, what are the peculiarities of the studied area making it interesting for our consideration? The answer is very simple. This is unique area. Let us consider some facts approving this point. This is one of three oldest centres of agriculture (especially fruit-growing) in Middle Asia (Borsuk, 1988). Human develops Nuratau area since late paleolith (Kasimov, 1972; Gulyamov, 1979). A commercial route through mountain passages from Ferghana to Zarafshan valley and Kyzylkums sands existed in the area since ancient times (Gulyamov, 1979). Ancient artifacts, mounds, rock arts, toponymical names and caravan-sheds spreaded across the entire area are witnesses of this fact (Alimov and etc., 1986; Borsuk, 1988; Karaev, 1991; Buryakov, 2003; Nemceva, 2004). Most part of them still are not studied, the other have already disappeared under waters of Aydar-Arnasay lakes system (AALS). In mountains and steppes of the area flint, copper, tin, silver, gold and turquoise were been mining during tens of thousands years (Hanikov, 1843; Vasil'ev, 1947; Mirbabaev, 1961; Vakturskaya and etc., 1968; Aleskerov, 1974). Nuratau area is admitted as a holy place, where due to the legends, Noah's Ark moored (Eversman, 1823) and where a throne of Noah's son Sim places (Skvarskiyi (?), 1896). Famous historical persons like Alexander Macedonian, Chzhan Czyan, Suan Czan, Fa-Syan, Chingiskhan, elders of Marco Polo, Timur, Mirza Ulugbek, Bobur and many the others visited this area.

# Objective

Goal of the work is to demonstrate a role of the Nuratau area in history of development of trade-economical relations of Central Asia before, in time and past of existing the GSR.

**Tasks:** 1) Collection and systemizing of information on history, economics, commercial routes and culture-economical centres; 2) Working out the structure and creation an electronic dB's (semantical, attributive and narrative); 3) Transformation the dB's into thematic GIS layers; 4) Creation of DEM and final version of GIS maps on historic-economical development of Nuratau area; 5) To carry out a historical analysis of commercial relationships and to demonstrate role of Nuratau area.

## Review

Nuratau area is placed in central part of Uzbekistan at joint of Samarkand, Dzhizak, Syrdarya, Navoyi, Bukhara provinces and part of south Kazakhstan (south-eastern Kyzylkums). The territory, which we associate with Nuratau area, differs a bit from conventional borders (Mashrapov, 1968). The reason of this difference is that we do not consider the area as a physicgeographical location, but we regard it as a historic-cultural province. The province has original distinctiveness, in spite of fact that it is close to Zarafshan valley (Karmisheva and etc., 1964) and has close historical relationships with Central Kyzylkums and Chardarya steppe. Nuratau area is a place where different civilizations of west and east dealt with each other. During its long history the area was under influence of different states and nations, beginning from Grece, Persia, Byzantium and continued by China, Arabs Khalifat, Mongolia and later Great Britain, Russian Empire and USA.

Nuratau area having unique physic-geographical peculiarities served as a natural barrier barring a way of nomads moving from broad steppes and deserts to Mavarounnahr (Karmisheva and etc., 1964). This way, Nuratau area actually was a crossroad and a comfortable passage for transit of international and regional commercial routes. Having two main mountain gates, the area became an important commerce 'Gate' into Zarafshan oasis, north Afghanistan and India. Those gates are in Ilanotty gap near Dzhizak and in Nuratau valley. The gates were covered by strong fortifications serving also as points for gathering customs from passing caravans. Besides, there were paths through mountain gorges known from end of bronze century, which connected Zarafshan oasis with Farish steppe, Central Kyzylkums and middle side of Syrdarya river. (Magidovich and etc., 1982).

## 2. MAIN BODY

#### Methods

Method of historical analysis was used. For this end, more than 300 bibliographical sources on archeology, ethnography, history, geography and irrigation (including translated to russian modern editions of old Persian and Arab manuscripts) were gathered and classified. Moreover, publications of Russian strangers dated from 1823 y. (Eversman, 1823, Bikchurin 1829; Horoshkhin, 1876 and etc.) and 14 cartographical sources (in that number 4 old maps dated from 1730 y.) were used. On this base narrative-semantical dB's were created. They consist of several divisions: historic-economical state; trade routes; descriptions of markets; category of transported goods; specializations of trade centers; list of transit trade crossroads; list of places with accumulations of rock arts; toponymical information. Let us consider two the last divisions more detail, since they play important role for reconstruction of commerce routes.For instance on mountain passes and gates since ancient times human left symbols - rock arts (Tikhvinskiy and etc., 1988)

In Nuratau area and surrounding territories they mainly were placed in mountain localities: Nuratau ridge (Shackiy, 1973; Muminov, 1995), Zirabulak-Ziauttdin mountains and mounts of Central Kyzylkums. Toponymical information also helps in determination of commercial infrastructure and directions of trade routes. Such a methodic was suggested first by V.I. Kireyev and E.B. Pruger (Kovalev, 1975) and later by S.K. Karayev for recognition of trade routes (Karaev, 1991). Essence of the method is interpretation of toponymical names due to the languages, which applied in common use on the considered territory at that time. For instance in south part of Nuratau area is a village named JAM or YAM, which in Mongolian language means post station. Such stations appeared since 1225 y. Under Mongols' power 'Yam's were away each from other at distance 5 'farsah's, i.e. about 30-32 km (Karaev, 1991). Toponyms of East never are occasional. In steppe, in south-western part of the area there is a village 'Ramitan'. Its name is translated from old Saghdian language as fortress at a road. This way, knowledge of meanings of toponymical names can be used for the reconstruction. Essentially, such kind of sources should be used accurately, together with narrative, semantical (archeological, historic-geographical) sources from ancient Arabian route guides (Petrovskiyi, 1894) and other cartographical information. Typological classifying of commercial routes and centres was carried out due to a methodic, which differs a little the methodic of E. Rtveladze (Rtveladze, 1999). The distinctions were in ways of regional, subregional, local and domestic divisions. I.e. we decide that regional elements belong to Central Asia, subregional to Middle Asia, local elements are inside the territories surrounding Nuratau and domestic elements are inside Nuratau area.

Applying historic-geographical approach in framework of GIS (Piatukh, 2004; Bartli and etc., 2004), we transform narrative-

that application of this approach extends widely possibilities of studies and "allows to use almost all kind of information of historical sources, which have to be organized spatially" (Piatukh, 2004). In general, 123 GIS layers, including 43 auxiliary and 80 main layers were created. Auxiliary layers consist of data on historical and modern administrative division, hydrography, populated areas, mountain gorges, relief, AALS in period of time 1984-2005 ys. AALS layer was necessary for determination already disappeared ancient roads and their infrastructure. Main layers consist of data on commercial routes, markets, their infrastructure, ancient agroceonoses, rock arts accumulations, types of economic centres and toponymical names. So, using GIS, two final thematic maps were completed. One of them is map of reconstructed commercial routes exploited before, in time and after existing the GSR. The other is map of perspective localities for further historic-archeological studies.

semantical dB's into GIS thematic layers. It should be noted

Knowing location of caravan road allows us to determine localities of elements of its infrastructure, for instance – wells, caravan-sheds, etc. So, in one word, having a map of old caravan roads, several ancient guidebooks and geographic-historical description of the locality we can compose plan-chart of perspective zones for searching buildings of infrastructure on the roads. In turn, availability of satellite and aero images simplifies significantly this search.

Moreover the DEM for demonstration uniqueness of Nuratau area as transit commercial crossroad was created. Map of perspective localities was completed on base of narrative information and GIS thematic maps on commercial routes, which had been created earlier. Overlay of this information on satellite imagery of high resolution allows recognizing traces of ancient roads and contour lines of ruins of caravan-sheds, fortresses and ancient agroceonoses for further field studies. The DEM was created in 2003 year on ground of topographical map of scale 1:500000 (of 1984 y.) on Nuratau area by exploiting GIS Software MapInfo Professional v.6.0. and GIS utillite All2pts v. 0.9 alfa (created by Emmanuel Pare). After creation the DEM, GIS layer on reconstruction of commercial routes in Nuratau area was put on it. Next historical analysis of all resulting information was completed. This shows that GIS is analytical facility, which describes not only spatial location of objects but also links of historic-economical processes, events and dynamics of their development.

Historical analysis is necessary for comprehension of modern processes and forecasting of tendencies of their development. Disregarding this analysis weakens a researcher both in theory and practice. For modern analytical and perspective elaborations it is important to know economic-geographical experience of the Past including history of commercial routes and centres and commercial-transporting infrastructure in whole. Knowledge of the Past allows us to forecast better tendencies, structure and parameters of Future (Lappo, 1987).

### Data used

**Map sources:** The Shtarlenberg map xerocopy of 'Nova descripto Tatariae magnae ham orientalis quam occidentalis' dated from 1730 year. The A. Il'in' 'Map of the Turkistan Governorship'. Scale 50 milestones (verst) per 1 English inch, Compiled by Staff-Captain Lyusin, under supervision of lieutenant colonel Narbut, Tashkent (in Russian), dated from 1871 year. The Bolshev' 'Map of the Southern Belt of Asian Russia' Sheet XIX Tashkent, in scale of 40 milestones (verst)

per 1 inch. Eastern Bukhara edited by of A.E. Snesarev, St. Petersburg (in Russian) dated from 1892 year. The scan copy of map of the French government 'Who covers whole Asia' with scale 1:1000000, Topo Sheet Nour-Ata, Paris, dated from 1904 year. Kindly rendered by Mr. Markus Hauser - Central As./Turkes./PamirArchive www.angelfire.com/nb/russianmaps The physic geography map of Middle Asia (East) with scale 1:1500000, GUGK USSR, dated from 1964 (?). The toposheet of 'Dzhizak'K-42-B with scale 1:500 000, GUGK USSR dated from 1984 year. The tourist map of the Great Silk Road of Uzbekistan, with scale 1:2000000, State committee of the Uzbekistan for land resources, geodesy, cartography and state cadastre, Tashkent, 2006 year. The historical scheme of Khorezm and Bukhara Khans' possessions in 16 centuries from book of History of Uzbekistan, volume 3, edited by A.A. Askarov, Tashkent, 1993 year. The map of finds silk materials in Russia from 11 to 13 centuries age in book of Caucus and Middle Asia in ancient and middle age time, Moscow, Science, 1981, pp.140, the author of map M.V. Fekhner. The Atlas of Tadjik SSR, Dushambe -Moscow, GUGK USSR, 1968 year. Archeological memorials with scale 1:1500000, the author H. Yu. Mukhitdinov pp. 190-191, Middle Asia in 7-8 centuries with scale 1:4500000 by author D.D. Djalilov p. 194, State of Samanians from 9 to 10 centuries with scale 1:8000000 by author N.N. Negmatov, p. 195. The scheme of Arab routes from 9 to 14 centuries in book of the Islamic renaissance, by author of A. Mez (Die renaissance des Islamic) in russian second edition, Edited by V.I. Belyaev, Moscow, Science, 1973, pp. 410. The thematic vegetation cover map of south-eastern Kyzylkums sand, with scale 1:500000, by auth. U. Allanazarova and T. Rakhimova, Tashkent, 2005 y. (Scientific Centre of Plant Production 'Botanika' Academy of Science of Uzbekistan) (applied under creation of GIS layer AALS 2005 y.).

Satellite images sources: Resource O1 MSU-E, FCC, 19 April 1998 year.

**dBases sources:** Narrative dB of historical of human impact in Nuratau area from Paleolith to Bukhara Emirate times (end of 19 th centuries).

**GIS dBases:** of physical geography of Uzbekistan dated from 1998 year with scale 1:1000000, historical map of human impact in Nuratau area from Paleolith to Middle age times with scale 1:500000 dated from 2003, the map of rock arts locations in Samarkand and Dzhizak provinces with scale 1:500000 dated from 1995 year, the map of dynamic changes of Aydar-Arnasay Lake Systems from 1984 to 2005 years with scale 1:500000, Digital elevation models of Nuratau area with scale 1:500000, dated from 1984 year. All sources from I.T. Muminov Ph.D. thesis (unpublished).

**Bibliographical sources:** more than 300, beginning from 1823 year. (Since indication of complete list of 350 bibliographical sources meets difficulties conditioned by restriction of volume of the work, author referred only to the most important sources).

**Instruments (sensors, systems etc.):** PC Pentium III 866Mhz/512 Mb RAM/64 MB Geofors MX video card/19' Fujitsu-Siemens monitor; HP SJ 4200; GIS Software – MapInfo Professional v. 6.0. En. and GIS utillite All2pts v. 0.9 alfa (created by Emmanuel Pare). MS' Word'97; MS' Excell'97; OS MS' Windows 98 SE.

## Results

Ancient caravan roads existed in Nuratau area before appearance of GSR: They connected domestic, local and subregional centres each with other. Through Nuratau area went most important transit ways of trade connecting Mavarounnahr with states of Central Asia, India, Seven-rivers, Volga side, South Urals and Siberia. In 15 century B.C. Soghdiana and Bactria obtained metals from areas of Eastern Kazakhstan and Altay [probably through Nuratau area] (Vasil'ev, 1947). In 6 century B.C. inside Nuratau area itself deposits of gold, copper, iron, lead and turquoise (North and South slopes of Nuratau ridge, Gobduntau) were also mined (Aleskerov, 1974; Buryakov, 2003). On base of rock arts interpretation it is assumed that from middle of 5 century B.C. in area of Bukantau mountains camels were tamed and bred (Os'kin, 1976).

From first quarter of 7 century B.C. troops of Midians of Kiaksar (Khuvakhshtr) penetrated into basin of Zarafshan river from Persia. It is admitted that in second guarter of 6 century B.C. army of Persian king Kir II arrived middle side of Yaksart (Syrdarya river) near its output from Ferghana valley, i.e. they discovered Hungry steppe. At the beginning of 6 century B.C. Dariy 1 could managed to conquest lands of 'Sacks which was behind the Soghd', i.e. to arrive the basin of upper Syrdarya -Ferghana valley (Magidovich, and etc. 1982). This way, at ancient times through Nuratau area went commercial routes connecting subregional mining centres, agricultural and breeding areas with other culture areas. Those routes were placed in eastern and western parts of Nuratau area. At east the route from Bactria passing Zarafshan, going by Dzhizak gate had arrived Hungry steppe where the route divided. One branch of the route went along Malguzar and Turkistan ridges through Kayrakum gate to Ferghana valley. The other branch passing diagonally Hungry steppe arrived middle side of Syrdarya River and Tashkent oasis. At west the route branching off meridional path (which went to south Urals, Volga side, Siberia and Seven-Rivers region) passing through mining centre of Central Kyzylkums went along south slope of Nuratau ridge further to Zarafshan valley. In that place a part of the route united the east branch, whilst its second part went to upper side of Zarafshan River, and the third part branching went to upper side of Amudarya River to Khorezm and its lower side to Badakhshan. The east and west directions of the route also joined domestic roads of the area which passed mountain gorges. Metals and turquoise were brought to Soghdiana and Bactria by those roads.

**Routes at period of existence the GSR:** Routes of GSR passed by different roads at different times. Due to methodic of B.Ya Stavitskiy (2007), time period of GSR existence should be divided onto 5 stages. They are: Beginning stage (from 3 till 1 centuries B.C.), Imperial (from 1 till 4 centuries), pre-Islamic period (from 5 till beginning of 8 c.), Arab-Islamic (end of 8c. – beginning of 13 c.), Mongolian and post-Mongolian (from middle of 13 to 16 cs.) Author would like to note that he enforced to highlight only main outlines of studied phenomena omitting historical background due to restrictions of volume of the work.

At first stage of the GSR: existence a segment of north road 'Beydao' passed through Nuratau area. That road starting in Loulan, going along Tian-Shan by river Tarim, to west till Shule (Kashgar). From Kashgar the route leaded to Ferghana valley through mountain pass Terek Davan, next it went to land Kantzuy (Maverannakhr) (Tikhvinskiy and etc., 1988). I.e. the route passed through Uzgen – Osh – Khodjekent – Zaamin – Dzhizak – Samarkhand – Bukhara – Chardjev – Merv – Serahs

– Meshkhed and further went to Europe (Map of GSR, 2006). By that route silk fabrics and mirrors of bronze passed from China to area of lower side of Volga and North side of Black sea through Nuratau area being transit zone. Besides, except of the above mentioned directions of GSR there were other directions of GSR passed by transit through Nuratau region: 1) Dzhizak –Tashkent - Isfindjab (Shymkent) – Aris – Otrar and further to Volga side; 2) Urmetan–Pendjikent– Samarkand– Kattakurgan–Karmania–Ramitan–Bukhara– Amul' (Chardjev)– Merv–Meshkhed–North Afghanistan–Iran; 3) Ramitan-Bukhara-Paykend–Kunia-Urghench–Volga side–Alania–Funlin (Istanbul); 4) Samarkand– Kish (Shahrisabz)–Termez–Balkh– Khulm–Kabul–India.

At 2 century B.C. Hanian stranger Chzhan Czyan visited Nuratau area (Chardarya and Hungry steppe, Dzhizak mountain gate, valley of middle side of Zarafshan River). He was a first man from China who discovered the way to the 'Western land'. Chinese historians decide that cultivation of lucerne, walnut and fig tree in China was introduced by Chzhan Czyan from Zarafshan and Ferghana cities (Vasil'ev, 1947; Magidovich and etc., 1982). Main flux of goods went by north route – Samarkhand and Ferghana (Tikhvinskiy and etc., 1988).

Main routes of commercial transports at GSR existence were described more detail.

**Imperial period:** through Nuratau region passed four commercial routes: 1) Samarkand–Dzhizak– Khavast–Isfara–Kuva–Osh–Kashgar–Turfan–Dunkhuan; 2) Samarkand–Dzhizak – Tashkent – Isfindzhab – Otrar – Sauran (Turkestan)–Volga side; 3) Tashkent-Dzhizak–Samarkand–Bukhara–Kyat–Kunia Urgench–North Caspian Sea–Black Sea side–Alania–East Europe; 4) Samarkhand–Chilek–Zarabulak– Bukhara–Farab–Amul'–Merv–Iran-Syria–North Afghanistan–India.

**Pre-Islamic period:** Biography of Pey Czyuy included to dynastic history 'Suyshi' contains important information about commercial routes in Central Asia at 5-7 centuries. Pey Czyuy wrote: 'From Dunkhuan to western sea go three roads, besides each of them has branches...'. [Our interest is a part of the road passing though Nuratau, which Pey Czyuy called middle road]. '...the middle road goes from Gaochan (Turfan) through Yan'czy (Karashar), Tsyutsy (Kucha), Tele and further through Tsunlin (Pamir) passes through states of Tsao (Ustrushan) – Khe, Big and Small An' (Karmany), Samarkand. Bukhara, Mugo (Merv), arrives Bosa (Sasanids' Iran) and reaches western sea' (Tikhvinskiy and etc., 1988).

About 15-20 kms northern from Nuratau ridge a steppe big old road goes parallel to the ridge. The road connects Bukhara through Nuratau and further Chardarya (where was a well equipped ford) with regions of South Kazakhstan. Accordingly results of archeological studies these buildings were built at 6-7 centuries. Chingis-Khan' army went to Bukhara by this road (Gulyamov, 1979).

Arab-Islamic period: In that period existed 16 ways, besides 6 of them were roads of Arab Khalifat, 2 of them were segments of GSR, whilst the other were roads of regional and subregional level. Main directions of that period were: Samarkand – Dzhizak – Talas – Turfan; Samarkand – Karmania – Bukhara – Amul' – Merv – Great – Persia – Arabia; Bukhara – Kungrad – Volga side; Samarkand – Dzhizak – Tashkent – Osh – Kashgar – Yarkend – Khotan – Lo-yan; Samarkand – Koshrabat –Nurata –Kuldzhuktau–Kunia-Urgench–Astrakhan; Samarkand-Dzhizak-Tashkent-Isfindjab (Shymkent)-Otrar; Dzhizak-RavatZaamin-Bundghikant-Kashgar; Bukhara-Nurata- Farish steppe-Solonchaks Aydar and Arnasay-Chardara steppe-Otrar-North side of Black Sea; «Junction of world trade routes: Amydarya-Samarkand-Balkh-Saganian-Alay-Kashgar» (Kastalskiyi, 1930).

In that period (8-13centuries) Nuratau area suffered a commercial boom, a lot of caravan sheds, wells and fortresses on plain and mountain parts of the region were being built (Nemceva, 2004; Savchuk-Kurbanov, 2006).

Mongolian and Post-Mongolian periods: Roads went by directions as follows: Volga side-Chingi Tura (Tumen)-Ishim-Sauran (Turkestan)-Otrar (Keder)-Nurata-Ramitan-Bukhara-Karshi (Route of Tohtamish, 1387 y.); Samarkand-Dahbet-Ravat-Kyzylkums sand-Kyzyl-Orda; Samarkand-Nurak-Chinazregion-Sibiria-China; Tashkent-Seven-Rivers Samarkand-Zaamin-Hodjekent-Andijan-Kashgar-Kul'dja; Samarkand-Chorshamba-Dabusia-Kattakurgan-Ziatdin-Karmaniya-Ramitan-Khiva-Astrakhan-Kazan'; Otrar-Nurata-Bukhara-Samarkand-Termez-Badahshan-Balkh-Merv-Nishapur-Gerat. At that period route Bukhara-Nurata-Farish steppe-Solonchaks Aydar and Arnasay-Otrar terminated its functions. Mongols did

not take interest in that route. **After GSR:** there were a lot of roads of different directions (Siberia, Afghanistan, Persia, China, Russia, Tibet and etc.). Since 16 century, significance of GSR was reduced, due to the great geographical discovers. The roads lost their international status, but preserved regional, subregional status and old commercial relationships. In turn, Bukhara became main wholesale transit storage for countries of whole Central-Asian region (Vasil'ev, 1947). From our point of view especially interesting is a circuit route passing through Nuratau going

interesting is a circuit route passing through Nuratau going through Kyzylkums to Turkestan and further passing through Kazakhstan to Ishim-Tumen-Tobol-Omsk-Barnaul-Ufa-Astrakhan and then along eastern shores of Caspian Sea through Usturt-Kungrad–Khiva–Farab–Bukhara–Gighduvan-Karmaniya coming back to Nurata. That was an old road, which was exploited by Russian merchants (Magidovich and etc., 1982).

DEM of the region was created. Mountain gates, and passing through them commercial roads were visualized on that DEM. This explains clearly uniqueness of Nuratau area for commercial relationships of Central Asia region.

An electronic dB: on historic-geographic-economical state of Nuratau region at period from 15 century B.C. to beginning of 20 century was created. To meet standards an electronic tables in MS Word format were applied. On the one hand the format is convenient for operating and on the other hand allows easy transformation to other formats. At all, there were 8 tables created: 1) bazars' descriptions; 2) categories and names of the goods transported through Nuratau area at periods before, in time and after of existence the GSR; 3) Typological division of states by territorial belonging (continental, regional etc); 4) Time division and names of commercial routes in Nuratau area. 5) Specialization of economical centres (breeding, mining etc); 6) Names of commercial centres, directions of commercial routes and reasons of their changes (politics, climate); 7) Transit export and import of the goods through the region; 8) Historic background of Nuratau area (relating to Chinese dynasties).

A thematic GIS map: on history of economical development of Nuratau from 15 century B.C. till beginning of 20 century was created. Economical centres, fortress, caravan sheds, wells, bazars (markets) etc., were pointed. Main directions of economical relationships of Nuratau area at different segments of considered time period were shown (before GSR – Persia, India, North side of Black Sea, South Urals, Siberia; at time of GSR – China, Persia, Siberia, South Kazakhstan, Seven Rivers region, India, Afghanistan, Tibet, Badakhshan, Volga side, Alania, Byzantium, Arabia; after the GSR – China, Persia, Afghanistan, India, Siberia, Tibet, Russia).

**Historic analysis of commercial relationships of Nuratau region:** Nuratau area played an important role for economical and political development of Central Asian population, which was conditioned by its convenient physic-geographical peculiarities and geographic-strategical location. Nuratau area was a strategic crossroads transit centre providing international and regional communications during more than 35 centuries.

At period before GSR, there were old caravan roads in Nuratau area. They connected domestic, local and subregional centres each with other. An important commercial transit routes linked Central Asia with Persia, India, Seven-Rivers region, Volga side, South Urals and Siberia. In period from 15 till 6 centuries B.C. mines functioned in subregional centres (Central Kyzylkums, Zirabulak-Ziatdin mountains, south and north slops of Nuratau ridge). There, flint, turquoise, tin, copper, silver, gold, iron and lead were mined (Mirbabaev, 1961; Aleskerov, 1974; Shtek, 1996; Buryakov, 2003; Nemceva, 2004). Output of the centres was exported in East and India (Savchuk-Kurbanov, 2006). In the same period of time immigrants from Khorezm and Samarkand were developing intensively gorges of Nuratau for agricultural needs (Kamelin and etc., 1990). This way, in ancient times through Nuratau area commercial roads connecting subregional mining centres, agricultural and breeding regions with the other cultural regions passed. The roads lay in eastern and western parts of the region.

**Roads at period of GSR:** Through Nuratau area a segment of North road of GSR connected with the other roads and their branches passed. Thanks to it, Nuratau area had economical relationships with Ferghana, China, Persia, Afghanistan, India, Arabia, Volga side, North side of Black Sea, Byzantium and indirectly with Europe. By that route silk fabrics and mirrors of bronze passed from China to area of lower Volga and North side of Black sea through Nuratau area being transit zone.

By the time, relating to political and climatic changes directions of the routes were alternating (Minuyoshi, 1975). For instance, at 6 century through commercial contradictions of Soghdians and Sasanian Iran transit road was blocked. That stimulated drawing a new detour road through Syrdarya - North side of Aral Sea and further along north shore of Caspian Sea to the West. At beginning of 13 century, that road was destroyed by Mongols (till 16 century).

**Roads at period after GSR:** In period from 16 till 19 centuries the commerce became dealing more with China, Tibet, Persia, India and Russia. After middle of 19 century, commercial relations tended to China, India (but up to 1880 y. they sufficiently weakened) and Persia. Commercial relationships with many of foreign countries and subregions were slowly reduced and tended more to the Persia ((up to 1908 y. there were a close commercial contacts (Burnasheva, 1969)) and Russian Empire (Troitsk, Orenburg, Krasnovodsk, Lower Novgorod). That was provided by politics of Russian Empire and 'building railway on South side of Caspian Sea' (Vasil'ev, 1947). In period after middle of 19 century commercial activity replaced from Bukhara to Samarkand and Tashkent.

## Discussion

Main result – it have been cleared up that Nuratau area was not disconnected from world commerce in the Past. Moreover, the region was an important chain both in the world economy and in the regional one. Changes happened in the world trade had an affect on the region. So, at 6 century a road to West passing through Persia was blocked. Immediately after that in Nuratau area detour road through Kyzylkums – Otrar and further to east appeared. There are lots of such examples, but restriction of volume of the article does not allow presenting almost of them.

It is interesting that at 16 century through Nuratau area a direct way to western Siberia lay. This way study of history of commercial relationships of Nuratau area breakthrough the frames of our local consideration. But such studies are significant for better understanding of whole history of Central Asia. We plan to create a multimedia atlas on all commercecultural relationships of Nuratau area in the Future.

## 3. CONCLUSIONS

Data on development of commerce-cultural relationships of Nuratau region during nearly 35 centuries were obtained. Main directions of commercial routes at different periods relating to GSR existence were recognized. (Before GSR – Central Kyzylkums, South Ural, Sibiria. Seven-Rivers region, East Kazakhstan, Persia, India; GSR – China, India, Persia, Arabia, Sibiria. Volga side, Alaniya, Byzantium, South Kazakhstan, Moscowia; After GSR – China, India, Tibet, Afghanistan, Persia, Russia).

Locations of commercial roads existed in Nuratau region in periods 15-6 centuries B.C., from 6B.C.to 13 century and 16-17 centuries were reconstructed.

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# AKNOWLEDGEMENTS

The author would like to thanks to Mr. Marcus Hauser from Pamir Archive (www.angelfire.com/nb/russianmaps) for the opportunity to work with map scanning copy 'Detailed Atlas of Russian Empire with plans of main cities' dated from 1871 year and map of the French government 'which covers whole Asia' in scale 1:1000000 dated from 1904 year. Author also expresses his gratitude to Dr. Josef Benedikt from 'GEOLOGIC' (www.geologic.at) Vienna, Austria for his help, translation from latin language of old map dated from 1730 year and consultations.