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Title: The concept of a high-speed railway between the Indian Ocean and Alaska in the context of the Belt and Road Initiative

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ABSTRACT

This paper reviews the antecedents and future potentials of a transcontinental high-speed railway from the Indian Ocean to the Bering Strait and Alaska. The original ideas date from the 19th century, but have regained relevance in the context of China's Belt and Road Initiative. Apart from increasing connectivity between Eurasia and America and developing economic complementarities between different parts of the world, a high-speed railway would open prospects for exploiting the agricultural and tourism potential of Siberia, mitigating economic and environmental risks in different regions, and raising standards of living. However, like a century ago, key barriers to the project remain a complicated physical geography, low population density and continuing geopolitical tensions.

INTRODUCTION

China's Belt and Road Initiative (BRI) includes the completion of large infrastructural projects inside and outside of China. These projects are expected to reshape the economic geography of Eurasia. The BRI is also associated with China's aspiration to create new non-competitive geopolitical balances in the areas that surround it and further afield; this aim includes seeking the prevention of new conflicts (Karaganov, 2019).

The vision for an inter-hemispheric path between the Indian Ocean and Alaska seems to fit into this ethos. Such a megaproject would be able to link the rail networks of the Global North and the Global South and create a cooperation platform involving key world players: the United States, China, India, Canada, Japan, Russia and the European Union (EU). The road is already being partly implemented in the framework of BRI. In the longer run, an integrated planetary rail network may be envisaged, stretching from the Cape of Good Hope to Santiago and Ushuaia.

While the creation of such a planetary rail network may sound futuristic, the groundwork ideas were already outlined as early as in the 19th century. More than a century ago, technical capabilities already allowed the development of railways of planetary reach and significance. The First World War, the Cold War and, importantly, the rise of ocean transportation halted many of these ideas and projects. However, as the volume, speed and reliability of transportation becomes increasingly important, and as high-speed railway (HSRW) technologies advance rapidly, governments and entrepreneurs in the United States, Russia and China are now returning to a consideration of the possibility of linking these nations by rail. What is more, BRI, which is underpinned by the might of the Chinese economy, may provide a platform for accomplishing such a megaproject for a transcontinental HSRW, linking the port of Gwadar on the Arabian Sea and Alaska.

Basing this study on a review of historical and contemporary materials, we explore what room might exist for resurrecting the historical ideas. As China's BRI is reviving the ancient routes of the Silk Road, the weighted centre of global economic activity is once again returning to China. In this light, establishing united rail corridors from Pakistan and India to North America (in addition to the current plans of enhancing China–Europe and China–West Asia rail links via Russia and Central Asia) emerges as a less-than-an-unlikely vision. The idea of HSRW also speaks to broader issues than the mere construction of a transport bridge between East and West: it can also fit into China's narrative of global inclusive and non-confrontational development (Liu, 2019).

THE 'COSMOPOLITAN RAILWAY': THE ORIGINS

One of the earliest proponents of a railroad linking the continents via a Bering Strait crossing was the Colorado Governor William Gilpin. In 1861, he put his ideas forward to the then US President Abraham Lincoln. He also went further and wrote *Cosmopolitan Railway: Compacting and Fusing Together All the World's Continents* (1890).

At the beginning of the 20th century, as an actual step in that direction, a Trans-Alaskan- Siberian company was created with the purpose of connecting New York, Moscow and Paris by rail. The project of the French entrepreneur Loic de Lobel involved constructing a railway with a length of 60000 km over 10 years (Figure 1). Starting in Alaska, the railway was to go through a tunnel under the Bering Strait (80 km long) to Yakutsk, and then to Kansk where it would connect with the Trans-Siberian Railway (Golovachev, 1906). The United States would finance the project and requested that the Russian state offer land rights of 12 km on both sides of the road for 90 years. The land rights would be divided between Russian and American companies.

Indeed, in October 1906, the Russian State Commission for the Creation of the Northern Sea Route decided to speed up the Lobel project. However, only six months later, the Tsarist government suspended the project for fear of American expansionism (Golovachev, 1906, 1914). The irony is, if the project were to take place, the United States would have probably become a major player in Russia's internal affairs, likely hampering the anti-Tsarist revolution of 1917.

Yet, the idea of a railway crossing across the Bering Strait did not go away easily, with traces also dating from 1918 and 1942 (Freeman, 2007). More notably, at the end of the Second World War, Joseph Stalin expressed to President Harry Truman his interest in connecting the USSR and the United States by a railway network. However, in the context of the cooling relations between the former allies, this interest faded very quickly (Barry, 2011). And yet, the Soviet Ministry of Railways and Ministry of Transport Construction continued designing an Asian–North American railway through a tunnel under the Bering Strait, along with railway projects leading to Japan through the La Perouse Strait, the Sakhalin Island and the Nevelskoy Strait and the Transpolar Siberian Highways (Beldey, 2015). Those projects were finally scrapped under Nikita Khrushchev.

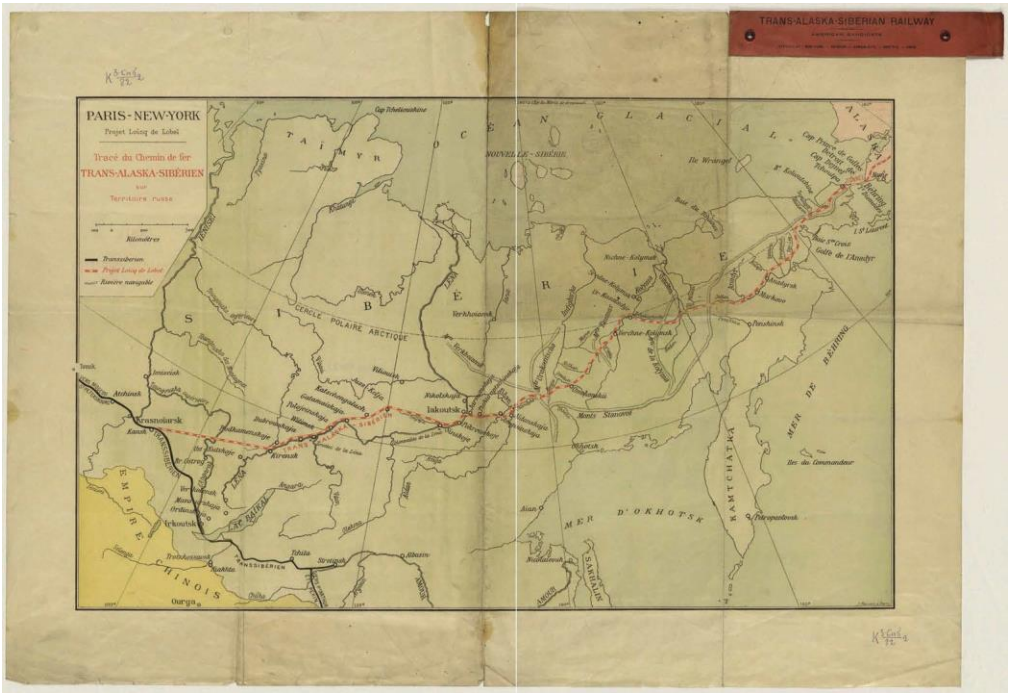

Figure 1. *Paris–New-York*. (1880). *Project Loïcq de Lobel*. *Tracé du Chemin de fer Trans-Alaska– Sibérien sur Territoire russe*, 188? 40 × 64 centimetres. http://vivaldi.nlr.ru/cm000000054/view Source: The National Library of Russia

The other leg, a railway from Russia to India through the Pamirs and the Hindu Kush, was also planned as

early as at the end of the 19th century. Baranovskii (1874) proposed a plan for the Indo-Volga Railway from Saratov to India in 1874 (Figure 2).

In 1888, rail traffic was brought to Samarkand. In 1899, it arrived in Tashkent and Andijan. The British built a railway from the Indian Ocean to Peshawar in 1895 (Figure 3).

It seemed that soon the cities of Skobelev (now Fergana) and Peshawar would be connected by rail, so that a united railway line from the Atlantic to the Indian Ocean would be put in place. Around the same period, a project for the construction of the China–Kyrgyz railway was proposed in Russia. This idea was inherited by the Osh–Khorog high-altitude route, the construction of which began before the First World War and continued in the 1920s (Bessarabov & Sobyanin, 2015).

From this brief sketch of major railway accomplishments and ideas in a period up to a century or so ago, it is clear that then existing technical capabilities allowed thinking, planning and even building railways of planetary importance. If so, why did those plans not come to their full fruition as a transcontinental rail network later in the 20th century? And could they become relevant again today?

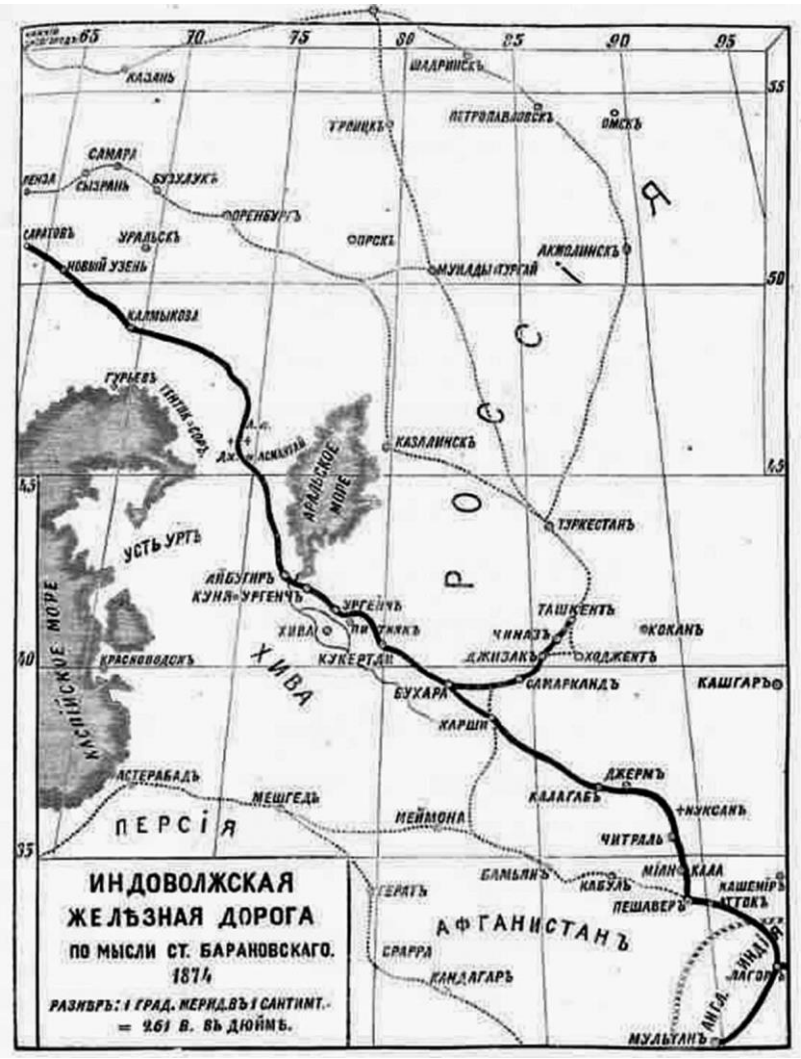

Figure 2. Plan for the Indo-Volga railway from Saratov to India (1874).

Note: Translation of the names of key geographical places from north to south: Казань, Kazan (Russia); Саратовъ, Saratov (Russia); Гурьевъ, Guryev (Russia, now Atyrau, Kazakhstan); Хива, Khiva (Khanate of Khiva, now Uzbekistan); Tashkent (Russia, now Uzbekistan); Бухара, Bukhara (Emirate of Bukhara, now Uzbekistan); Kashgar/Kashi (Xin Jiang, China); Персіа, Persian Empire (now Iran); Пешавер, Peshawar (Afghanistan, now Pakistan); Кандагар, Kandahar (Afghanistan); and Лагоръ, Lahore (British India, now Pakistan).

FROM OCEAN TRANSPORTATION TO HIGH-SPEED RAIL?

These ambitious projects became less attractive with the advent of the Cold War and, importantly, with the increased capabilities of ocean shipping. Today about 98% of cargo between Asia and Europe goes through the Indian Ocean and only 1.5–2.0% travels along the Trans-Siberian Railway and by air (Vinokurov et al., 2018). Even in the case of Russia, 90% of imports from China arrive not via the Trans-Siberian Railway, as might be expected, but via deep-sea container terminals in the North Sea and the Baltic Sea (Golubchikov et al., 2012). However, the transit capabilities of the Indian Ocean are not unlimited. Owing to the capacity of the Strait of Malacca and the Suez Canal, the average duration of the maritime journey from Shanghai to Europe is 30 days. Cargo delivery is often threatened by storms and hurricanes, as well as pirate attacks and other accidents.

The ocean routes are also susceptible to geopolitical instability. Passage through Suez will be jeopardized in the event of any major military confrontation in the region. Events over the past few years demonstrate that this is not an unthinkable scenario. The region is already heavily militarized by both internal and external actors. For example, the world shares of Southwest Asia in terms of land is 5%, population is 4.2% and gross domestic product (GDP) is 3.4%, and yet the share of the region in terms of the number of armed forces is more than 12%, tanks is 18.5% and combat aircraft is 12.3% (Martynov, 2008). Unforeseen circumstances may also provoke a conflict in the Taiwan Strait and in the South China Sea. Tensions may emerge between China and India in the Indian Ocean, if, for example, a conflict breaks out over their disputed borders in the Himalayas. At the same time, maritime transport is also limited by environmental constraints and its implications for climate change. Increasingly larger container vessels require increases in fuel consumption and construction of deep-water berths. Low-carbon cargo shipping remains a distant prospect.

From these perspectives, rail transport emerges as a favourable alternative. The focus of China's national development model is currently changing from quantitative to qualitative growth, involving building 'an ecological civilization', with renewable energy sources, electric vehicles, energy-efficient cities, as well as growing living standards and reduced social inequality. As part of this strategy, Chinese high-speed trains are to rely, as much as possible, on fuel sourced from renewable and hydroelectric power in order to reduce significantly the pollution and CO_2 emissions associated with this mode of transport (Dunford, 2015; Liu, 2019).

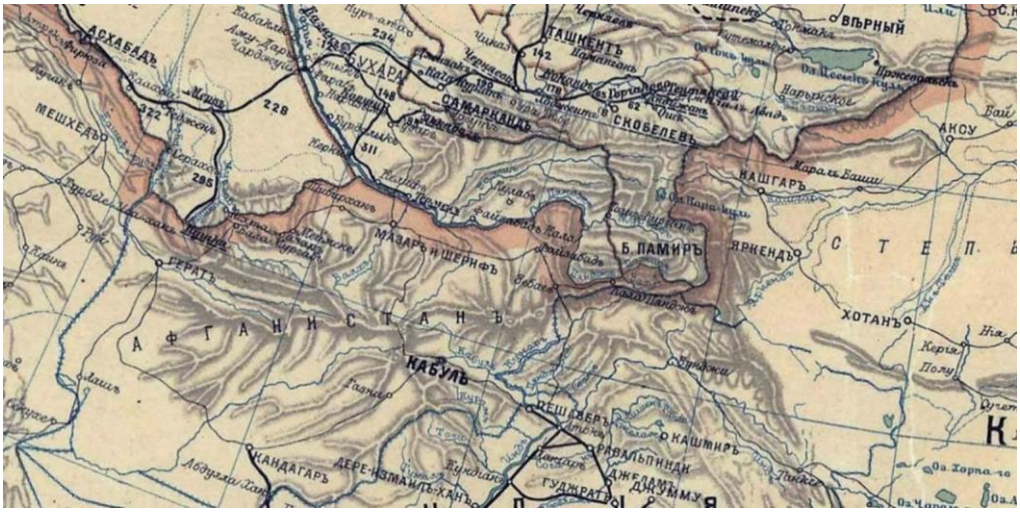

Figure 3. Railways (bold lines) in the Russian and British territories in West Asia. Source: SPb (1916).

THE MODERN AVATAR OF THE SILK ROAD

From the 15th and 16th centuries, the Great Silk Road, which had connected the ancient civilizations of China, India, Persia and the Arab world to Venice and Spain through the Byzantine Empire, started to fade in importance. Its decline and eventual collapse are often associated with the Age of Discovery and the subsequent onset of the Industrial Revolution. However, these historical events only intensified the exchange of goods, so that rather than diminishing in importance, the Great Silk Road might have been expected to flourish again with these developments.

However, the Age of Discovery itself was influenced by the extinction of the Great Silk Road, preceded by a carousel of the great migrations of peoples. The pressure of the Seljuk Turks on the Byzantine Empire increased and culminated in the capture of Constantinople in 1453. The Ottoman Empire took control of the entire Silk Road, including all its most important branches. The Turks conquered Hungary, Croatia, Moldova, fought Austria and more than once advanced to Moscow. The Black Sea became an internal sea of the Ottoman Empire. The Mediterranean Sea turned into a dead end, from which there was no way out until the opening of the Suez Canal. Venice, Florence and Genoa quickly fell into decay. The final cessation of trade between China and Europe was inevitable. Even at the courts of the top rulers, tea supplies were depleted, silk and expensive carpets were dilapidated, and pepper and other spices disappeared. In those circumstances, the peoples of Europe looked at the open waters of the Atlantic Ocean and free lands beyond the Urals, which were not dominated by powerful nations and inevitably asked themselves: is there another way to India and China?

Since then, maritime routes have dominated intercontinental transport flows. The global centre of economic gravity began to shift towards Europe (*The Economist*, 2018). Spain and Portugal established huge, but short-lived, colonial possessions. The Dutch, English and French colonial powers expanded amidst the wreckage. Russia, in its colonial ascension, turned into the Russian Empire. Throughout the 19th century, the global centre of economic gravity lay on the western borders of the Russian Empire.

After the Second World War, the centre moved in the direction of North America, but it did not move beyond the Western Atlantic. Since 1950, the economic centre of gravity has been slowly moving back eastwards. In 1990s and 2000s, China experienced some of the most intensive economic growth rates on the planet. As a result, the direction of movement of the global centre of economic gravity changed, moving eastwards and is now approaching the cities of southern Siberia (*The Economist*, 2018). If these trends continue, by 2050 the global centre of economic gravity will lie in south-west China, approximately where it was before the Industrial Revolution (Dunford & Yeung, 2011).

In 2013, the wealth accumulated in China allowed its government to announce the BRI, promising (amongst other things) large infrastructure projects inside and outside of China. Critics of the BRI suggest that the aim is for China to secure its geopolitical hegemony. According to this argument, for example, the development of the economically less developed and separatist-minded Xinjiang Uygur Autonomous Region, as a key area in the BRI, is to obtain access to its huge oil and gas fields. In so far as initiatives outside of China are concerned, critics claim that BRI projects will burden partner countries with unrepayable debts and that nationalist politicians will resist the implementation of Chinese projects (Kolosov & Zotova, 2019; Miholjcic, 2019). Conversely, advocates argue that the BRI opens a new era of inclusive globalization (Dunford & Liu, 2019; Liu, 2019; Liu et al., 2018), while the claims about China's 'debt-trap diplomacy' have also been questioned (Brautigam, 2020).

Whatever the standing position, it does seem clear that the BRI revives the role of the ancient routes of the Silk Road, along which Buddhism and Islam, Arab astronomy, calendars and medicine came to China, while Chinese great inventions and sericulture spread to the rest of the world. The Great Silk Road is considered as a common part of the valuable cultural heritage of many countries and civilizations (Dunford & Liu, 2017, 2019). The ideological platform of the BRI is the Confucian concept of harmony, emphasizing respect for differences – which is actualized for the contemporary world. Indeed, today no country or group of countries can successfully build their socioeconomic policies in isolation (Limonov & Nesena, 2016).

LINKING THE TRANS-SIBERIAN RAILWAY AND THE INDIAN OCEAN

Up to 60–80% (depending on estimates) of China's oil imports travel from the Persian Gulf along the Strait of Ormuz. In order to increase its energy security and also to reduce shipping distances, China has focused on building the port of Gwadar in Pakistan. It is located in strategically important proximity to the Persian Gulf (Shehryar & Guijian, 2018). Gwadar is to be turned into a major Chinese naval port in the Indian Ocean and an important hub for transporting oil from the Middle East to China by land, bypassing the Strait of Malacca. A construction of a 2000 km railway will connect Gwadar with Kashgar in Xinjiang Uygur Autonomous Region (Sazonov & Tzu, 2019; Liu, 2019). With the implementation of this HSRW, the port of Gwadar will also become 'closer' to Siberia.

The road section between Islamabad and Kashgar is the most difficult part to build; the 682-km railway will run parallel to the Karakorum highway, opened in 1986. However, modern construction technologies tested in the Andes and Tibet provide new solutions, including, for example, elevated rail tracks built from factory-made modules. These modes of construction limit interference of wildlife migration paths or watercourses and do not require extensive earthworks.

China is also reviving the plan to build the Sino-Kyrgyz Railway to the west of Kashgar, which would run alongside the Pamir Highway between Osh and Khorog built in the early 20th century. This time, the railway will pass from Kashgar (Xinjiang) through Osh (Kyrgyzstan) to Tashkent (Uzbekistan). In future, it can be extended via Turkmenistan, Iran and Turkey to Bulgaria and Romania (Sazonov & Tzu, 2019). The states of Central Asia have inherited from the USSR a fairly developed railway network. With a total length of 20,000 km, this network is already linked with the Trans-Siberian Railway. China is also interested in taking part in the modernization of the Trans-Siberian Railway in the framework of the construction of the Moscow–Kazan HSRW. This section is 770 km long and can reduce the travel time between Moscow and Kazan from 14 to 3.5 hours (Bennett, 2016).

In constructing new railway lines, China insists on the European standard for rail gauge (1435 mm wide) (Rakhimov, 2015). However, in countries that were either part of the USSR or depended on it, a track width of 1520 mm applies. Large amounts of investment would be needed to replace thousands of kilometres of the broad-gauge track. However, the track standard per se is not a stumbling block. The Japanese built a narrow-gauge railway on Sakhalin, which still functions along with the Russian standard. Spain and Finland have wide-gauge routes such as in Russia, but in neighbouring France or Sweden a narrow gauge is used. Several former British colonies, in particular India and Pakistan, use a yet wider gauge of 1676 mm (along with other sizes). From there, a British colonial wide gauge route of 1676 mm can be laid to Kandahar and Kabul (Rakhimov, 2015). There are various technical ways how the gauges are integrated with each other. What matters is not the technicality of the track but the creation of a network of meridional, diagonal and latitudinal railways.

From Kashgar there is a railway line to Urumqi (capital of Xinjiang) and Lanzhou to the east. There is also a proposal to create a northeastern branch from Lanzhou crossing Mongolia and connecting to the Trans-Siberian Railway through the Kuragino–Kyzyl railway, which is under construction.

These ongoing projects suggest that a HSRW stretching from the Indian Ocean to Siberia becomes a near-future prospect. The countries of Central Asia and Xinjiang will secure access to the ports of the Indian, Atlantic, Pacific (through China) and Arctic (through Russia) oceans (Tao et al., 2019; Liu et al., 2018), while Xinjiang becomes an inter-oceanic hub connecting China with Pakistan, India, the Middle East, Europe and Africa. If there is an extension of this rail network to the east – to Japan and through Russia and Alaska to Canada, the United States and Latin America – Xinjiang will be in the heart of a super web, the threads of which will knit together the world's most important economic flows – between the EU, Asia-Pacific, the Arctic, India, the Islamic South, and North and South America (Plyusnin, 2015).

LINKING THE TRANS-SIBERIAN RAILWAY AND ALASKA

A new project for an intercontinental railway (ICR) passing through the Bering Strait has been discussed in various circles since at least 2007 (InterBering, 2020; Menshikov, 2007). This new railway with a length of about 6000 km would connect the existing networks of North America, Russia, Asia and Europe. The project will require the construction of the world's longest underwater tunnel (about 100 km long and more than 50 m deep) under the Bering Strait. The route through the Bering Strait can also be connected with Sakhalin, Hokkaido and Kamchatka.

A rail linking Alaska to Russia and Canada would give Alaska a great economic impetus, because it will end the relative isolation of the largest state in the United States, make it a transcontinental hub and increase opportunities to ship its resources to vast new markets (InterBering, 2020). At present, as much as 85% of the food, commercial goods, equipment and other goods for Alaska go through the only port of Anchorage. The average supply of food on the shelves and in the warehouses of Alaska lasts only three days. If the port is damaged due to a potential disaster, Alaskans are at risk of being left without supplies (InterBering, 2020). At the same time, the creation of a railway line through the Bering Strait would make the state a geographical centre in the world trade network. It is estimated that over 100 million gross tons of cargo could be transported annually through a Bering Strait crossing, which would provide faster delivery times between the United States, China and other global trade points (Koumal et al., 2019).

The creation of a unified transport system (which can be called Panamerica–Transasia) would attract significant volumes of international freight flows, increase competitiveness of the Northern Sea Route (which becomes increasingly accessible due to climate change) and interconnect latitudinal international transport corridors (Northern Sea Route, Trans-Siberian Railway, TRACECA, etc.). In addition to its geoeconomic significance, experts consider the formation of such a web of planetary routes as a generational opportunity to strengthen a dialogue of civilizations. Creating long-term trade and economic

cooperation may contribute to mitigating major geopolitical tensions (Ryskulov, 2015).

The cost of ICR would depend on many factors, of which it is hard to take full account without detailed technical and economic survey. What is clear, leveraging it will certainly be a grand challenge. But it is not beyond the reach of the world's main economies potentially involved in the project.

China has been reported as expressing an interest in extending its high-speed rail networks to the United States. A route can begin from Northeast China and pass through the eastern part of Russia, the Bering Strait, Alaska, Canada, before reaching the main part of the United States. The total length is approximately 13,000 km. This is a long distance, but only 3000–4000 km longer than the Trans-Siberian Railway built a century ago. It is predicted that trains will be able to operate at 350 km/hour, which would allow passengers to travel from Northeast China to the United States in fewer than two days ('China plans …', 2014).

Geopolitics certainly looms large in such megaprojects, whether stimulating them or creating barriers. In Russia, there are common fears that a China-led HSRW will accelerate the penetration of Chinese migrants and their settlement in the Russian Far East. However, the main geopolitical risk for Russia is the continuing outflow of the Russian population from Siberia and the Far East, which can be reverted with the new significant investment and modern infrastructure. In the past three decades, the population of the Magadan region has decreased by 3.9 times and of the Chukotka district by 3.1 times (Figure 4). In total, 1.2 million people have left Chukotka, Kamchatka, the Magadan Region and the Khabarovsk Territory. This is an unprecedented outflow of population from recently reliably populated spaces in peace time. During the same period, the population of neighbouring Alaska grew by 190,000 and reached 737,000 (Duffin, 2019).

Russia needs to improve the quality of living for its residents, particularly so in remote and peripheral areas (Kiva, 2015). The development of the HSRW is one way of improving the quality of life of the inhabitants of the north-east, including by giving them a new centrality in national and international economic and symbolic flows.

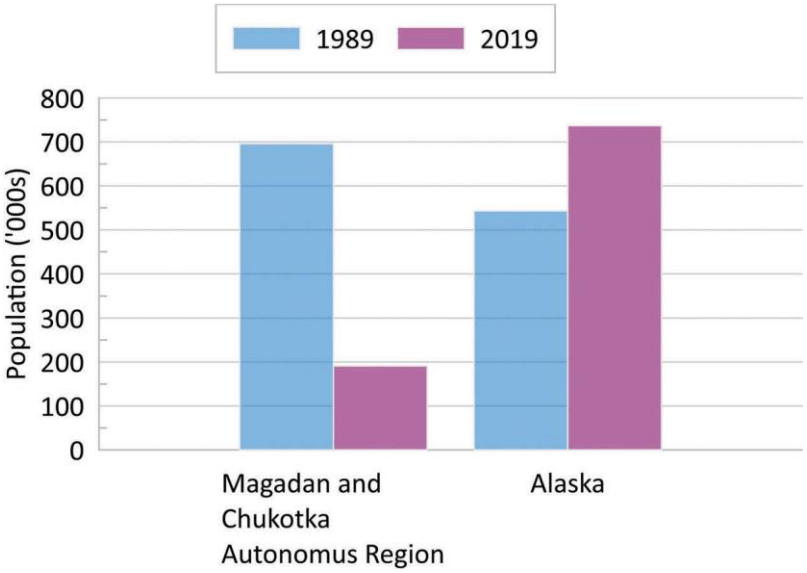

Figure 4. Population of the north-east of Russia and Alaska.

ADVANTAGES OF RAIL AS A MODE OF TRANSPORT

In high-latitude and high-mountain regions, railway lines cross some of the most vulnerable natural and human environments. The low density of the population with a dispersed human settlement system is combined with traditional types of livelihood and environmental management. These environments become particularly susceptible to the impact of climate change (e.g. Thornbush & Golubchikov, 2009). Will railways constitute a further danger to their existence? Of course, a railway carries risks for natural and traditional environments, although compared with the automobile, it can fit more modestly into the landscape, with minimal destruction. Most high-speed trains in countries such as Russia and China are already powered by electricity, so they are potentially not as dependent on oil as ocean shipping (Figure 5). While the production of electricity itself still relies on high-carbon fuels in these countries (and particularly on coal in China), energy transitions will increasingly push them in the direction of lower carbon futures.

THE FOOD VALUE OF SIBERIA FOR CENTRAL ASIA AND CHINA

Like no other large space, the countries of Central Asia are subject to the cycles of wet and dry seasons with far-reaching sociocultural consequences. Deserts are still expanding. Glaciers are melting and retreating. The Aral Sea has dried up. The waters of the Amu-Darya and Syr-Darya are taken for irrigation. All these developments are due to population growth and its concentration in cities. When Soviet troops entered Kabul, 650,000 people lived there (Slinkin, 2003). Today Kabul is a city of over 4 million, or 5 million if one includes the suburbs.

The population of the states of Central Asia doubles every 25 years (Table 1). If these trends continue, by 2050 the Islamic countries of the former USSR will have twice as many people as Russia (Golubchikov & Mnatsakanyan, 2005). A consequence of high fertility is a high proportion of young people and demographic pressures. The inability of the economy to absorb the increased population leads to unemployment and poverty. All this is accompanied by reduced arable land and the aggravation of food shortages. If population density is calculated not for the entire area of the countries (which includes uninhabited deserts and mountains), but in relation to agricultural land available, Central Asia would report some of the highest densities in the world. Even in mountain areas, in some valleys and gorges, a population density of 500 people/km^2 is not uncommon. In Tajikistan, 93% of the land is mountainous. The sown area per capita has decreased since 1945 from 0.6 to 0.17 ha, compared with an average of 0.8 ha in the USSR. Already back in the Soviet era, Tajikistan, most of whose inhabitants worked in agriculture, could not satisfy its own food requirements (Shustov, 2011).

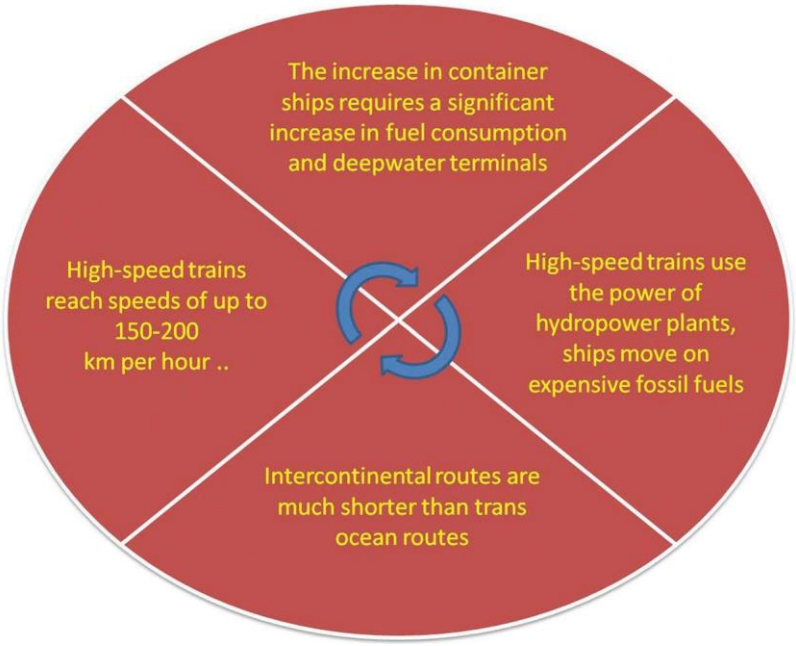

Figure 5. Advantages of high-speed railway over sea transport in cargo delivery.

Population growth in Central Asia increases export opportunities for grain-producing regions in Siberia, the Urals and the Volga region. In some recent years, the yields of grain crops in Russia reached record levels (120 million tons). Of these, 15–20 million tons are produced in the Siberian Federal District with a domestic demand of 12 million tons. Siberia can produce more grain, but where can it send it? The Black Sea ports are already overloaded with grain from the southern regions of European Russia. The Far Eastern ports are small, and there are difficulties with the transshipment of grain from platforms to ships.

With the advent of the HSRW, Russia has the opportunity to return to the world agricultural market as a main exporter of agricultural products, not only to the West, as in Tsarist Russia, but also to the south. Exports can include not only grain but also perishable agricultural products such as meat and milk. Demand for these products will increase. According to some forecasts, China will become one of the world's leading importers of meat in the next decade (Makarov & Sokolova, 2016). With 20% of the world's

population, China has only 8% of the world's cultivated land (Dunford, 2015) (Table 2). The United States is currently the main importer of food to China (Kolosov & Zotova, 2019).

Table 1. Population in Central Asia (millions)

	1960	2000	2019
Tajikistan	2.0	6.2	9.3
Uzbekistan	8.5	24.5	33.5
Afghanistan	9.0	20.0	32.0

Source: Tajikistan Population, 2019; Statistica qo'mitasi, 2019; Migration Profile, 2015.

Table 2. Share of Russia and China of the world's resources.

	Population (%)	Cultivated land (%)	Renewable water resources (%)	Forest area (%)	Forest stocks (%)
China	20%	8%	5%	5%	5%
Russia	2%	8%	10%	20%	25%

CONCLUSIONS

The future of humanity will depend on the achievement of economic, political and social cooperation and integration of the leading nations, as opposed to their confrontations. The construction of a HSRW from the Indian Ocean to the Bering Strait and Alaska may be considered as an integration vehicle of planetary significance. As the transcontinental ocean modes reach their environmental and geopolitical limits, planetary railways envisaged in the 19th century may have a role to play in the future of humanity. The HSRW could potentially connect the Western Hemisphere (the United States, Canada, Central and South America) and the Eastern Hemisphere (China, Russia, India, Iran, Pakistan, Japan, the EU and Africa). The implementation of such a megaproject involving many countries and strengthening the connectivity between the Eurasian and African continents, on the one hand, and the Northern and South American continents, on the other, may open a new page in the history of civilization. However, as with any major historical accomplishments, the key to its initiation and realization will be strategic vision and global leadership.

REFERENCES

Baranovskii, S. (1874). Indo-Volga railroad. *Niva*, *34*, 536–539. (in Russian). zerrspiegel.orientphil.uni-halle.de/i53.html

Barry, M. P. (2011, October 04). *Advancing the Bering Strait Tunnel Project in the United States and Canada*. Universal Peace Federation, The U.S. Capitol. http://www.upf.org/resources/speeches-and-articles/4017- mp-barry-advancing-the-bering-strait-tunnel-project-in-the-united-states-and-canada

Beldey, V. A. (2015). The system of Eurasian transport corridors – Image of the future of modern Russia for Eurasia and the World. In A. V. Vorobiev, K. K. Rakhimov, & A. D. Sobyanin Eds., *STEC: System of transport Eurasian corridors/Comp* (pp. 571–577). Center for Strategic Market Conditions. (in Russian).

Bennett, M. (2016). The silk road goes North: Russia's role within China's Belt and road initiative. *Area Development and Policy*, *1*(3), 341–351. http://doi.org/10.1080/23792949.2016.1239508

Bessarabov, G. D., & Sobyanin, A. D. (2015). On Russia's economic presence in Western China and Central Asia: Sino-Kyrgyz railway. In A. V. Vorobiev, K. K. Rakhimov, & A. D. Sobyanin Eds., *STEC: System of transport Eurasian corridors/Comp* (pp. 268–277). Center for Strategic Market Conditions. (in Russian).

Brautigam, D. (2020). Debt-trap diplomacy: The rise of a meme. *Area Development and Policy*, *5*(1), 1–51. http://doi.org/10.1080/23792949.2019.1689828

China plans to build high speed rail networks to US. (2014, May 09). *The Economic Times*. economictimes.indiatimes.com/articleshow/34873289.cms?from=mdr&utm_source=contentofinterest&utm_medium=tex t&utm_campaign=cppst

Duffin, E. (2019). *Resident population in Alaska from 1960 to 2018 (in 1,000)*. https://www.statista.com/statistics/206081/resident-population-in-alaska/

Dunford, M. (2015). Chinese economic development and its social and institutional foundations. In M. Dunford & W. Liu (Eds.), *Geographical transformation of China* (Vol. 133, pp. 1–21). Routledge.

Dunford, M., & Liu, W. (2019, March). Chinese perspectives on the belt and road initiative. *Cambridge Journal of Regions, Economy and Society*, *12* (1), 145–167. http://doi.org/10.1093/cjres/rsy032

Dunford, M., & Liu, W. D. (2017). Uneven and combined development. *Regional Studies*, *51*(1), 69–85. http://doi.org/10.1080/00343404.2016.1262946

Dunford, M., & Yeung, G. (2011). Towards global convergence: Emerging economies, the rise of China and western sunset? *European Urban and Regional Studies*, *18*(1), 22–46. https://doi.org/10.1177/0969776410382596

Freeman, R. (2007). The 19th century origins of The Bering Strait Project, *21st CENTURY. Science & Technology* (Spring/Summer), 45–46. https://larouchepub.com/eiw/public/2007/eirv34n18-20070504/41-42_718_chron.pdf

Gilpin, W. (1890). The cosmopolitan railway: Compacting and fusing together all the World's Continents (p. 370). The History Company.

Golovachev, P. M. (1906). Regarding the project of the Siberian–American railway. (pp. 157–166). *Siberian Issues*, *2*, 157–166.

Golovachev, P. M. (1914). *Economic geography of Siberia* (p. 184). Sytin Printing House. (in Russian).

Golubchikov, Y. N., & Mnatsakanyan, R. A. (2005). *Islamization of Russia. Alarming scenarios of the future* (p. 416). Veche. (in Russian).

Golubchikov, Y. N., Rakhimov, K. K., Sobyanin, A. D., & Tikunov, V. S. (2012). Geographical substantiation of the Indo-Siberian transport direction. *Geography and Natural Resources*, *33*(3), 258–261. http://doi.org/10.1134/S1875372812030134

InterBering. (2020). *LLC Bering Strait Tunnel & Railroad Construction Investment Corporation*. International Railroad. http://www.info-quest.org/INTERBERING_TUNNEL_PLAN.html

Karaganov, S. A. (2019). Russia – Retuning home. In: Kotlyakov, V. M. and Shuper, V. A. (Eds.), *Problems of Geography, Russia in the forming Greater Eurasia* (pp. 9–15). Moscow: Kodeks. (in Russian).

Kiva, A. (2015). *Yuan devaluation: Realities and fiction*. Stoletie.RU (in Russian). http://www.stoletie.ru/rossiya_i_mir/devalvacija_juana_realii_i_vymysly_437.htm

Kolosov, V. A., & Zotova, M. V. (2019). China and Russian–Chinse relations in the mirror of Russian discourse *problems of geography*. In V. M. Kotlyakov & V. A. Shuper Eds., *Russia in the forming greater Eurasia* (Vol. 148; pp. 281–308). Kodeks, Russian Geographical Society. (in Russian).

Koumal, G., Henri, J., & Spencer, S. (2019). *Transforming Alaska's next 60 years: The intercontinental railway*. InterBering, LLC. Bering Strait Tunnel & Railroad Construction Investment Corporation. (in Russian). http://www.interbering.com/Alaska-intercontinental-railway.html

Limonov, L., & Nesena, M. (2016). Cultural diversity of Russian regions: Does it matter for industrial performance. *Area Development and Policy*, *1*(1), 63–93. http://doi.org/10.1080/23792949.2016.1164016

Liu, W. (2019). *The belt and road initiative: A pathway towards inclusive globalization*. Routledge.

Liu, Z., Wang, T., Won, J., & Chen, W. (2018). The structure and evolution of trade relations between countries along the belt and road. *Journal of Geographical Sciences*, *28*(9), 1233–1248. http://doi.org/10.1007/s11442-018-1522-

Main structural projects in the Siberian region (2019). (in Russian). http://cdnimg.rg.ru/pril/article/103/71/66/970_12.gif

Makarov, I. A., & Sokolova, A. (2016). The Eurasian Economic Union and the silk road economic Belt: Opportunities for Russia. *International Organizations Research Journal*, *11*(2), 40–57. http://doi.org/10. 17323/1996-7845-2016-02-40

Martynov, V. L. (2008, September 9). *Military geography at the beginning of the XXI century*. Geography.

Appendix to the newspaper. (in Russian). https://geo.1sept.ru/article.php?ID=200800904

Menshikov, S. (2007, September 28). *The Bering Strait megaproject: Political and economic aspects*. Slovo. (in Russian). http://www.fastcenter.ru/smenshikov/slovo/smmslovo232.htm

Migration Profile: Afghanistan 2014. (2015). *Prepared for the International Organization for Migration (IOM) by Katrin Marchand Melissa Siegel Katie Kuschminder Nassim Majidi Michaella Vanore Carla Buil International Organization for Migration* (p. 287). https://afghanistan.iom.int/sites/default/files/Reports/afghanistan_migration_profile.pdf

Miholjcic, N. (2019). *Implications of Sino-Russian Rapprochement for Central Asia*. Institute for War & Peace Reporting (IWPR). Central Asian Bureau for Analytical Reporting (CABAR). https://cabar.asia/en/ implications-of-sino-russian-rapprochement-for-central-asia/

Plyusnin, Y. M. (2015). Potential of the middle development corridor «The Arctic – Central Eurasia». In A. V. Vorobiev, K. K. Rakhimov, & A. D. Sobyanin Eds. *Different look/STEC: System of transport Eurasian corridors/ Comp* (pp. 495–499). Center for Strategic Market Conditions. (in Russian). http://conjuncture.ru/book-stec-2015

Rakhimov, K. K. (2015). Railway to China – Civilizational choice of Kyrgyzstan against Russia and Kazakhstan. In A. V. Vorobiev, K. K. Rakhimov, & A. D. Sobyanin Eds. *STEC: System of transport Eurasian corridors/Comp* (pp. 304–313). Center for Strategic Market Conditions. (in Russian). http://conjuncture.ru/book-stec-2015

Ryskulov, D. M. (2015). Trans-Asian trade route world economy. In A. V. Vorobiev, K. K. Rakhimov, & A.D. Sobyanin Eds., *STEC: System of transport Eurasian corridors/Comp* (pp. 468–494). Center for Strategic Market Conditions. (in Russian). http://conjuncture.ru/book-stec-2015

Sazonov, S. L., & Tzu, U. (2019). PRC railway transport. In S. G. Luzyanin Ed., *Development imperatives* (p. 408). Insitut Far East RAN. (in Russian).

Shehryar, K., & Guijian, L. (2018, November). The China–Pakistan Economic Corridor (CPEC): Challenges and prospects. *Area Development and Policy*, *4*(4), 466–473. http://doi.org/10.1080/23792949.2018.1534549

Shustov, A. V. (2011). *There will be more blood in Central Asia than in Egypt, Postsovet, Blog 'Central Asia'*. (in Russian). http://www.postsovet.ru/blog/asia/67890.html

Slinkin, M. F. (2003). Afghanistan: Pages of history (80–90s of XX century). In: Tomsk State University (Ed.), *Culture of the peoples of the Black Sea* (Vol. 41; pp. 201). TSU. (in Russian).

SPb (1916). *Map of railways of the Russian Empire*. (in Russian). http://andcvet.narod.ru/DR/12/max/1916.jpg

Statistica qo'mitasi. (2019). *Demographic situation*. https://www.stat.uz/en/press-center/news-committee/6429-34634634634

Tajikistan Population. (2019). https://countrymeters.info/en/Tajikistan

Tao, S., Liu, W., Liu, Z., & Wuzhati, Y. (2019). Policy mobilities and the China model pairing aid policy in Xinjiang. *Sustainability*, *11* (13), 1–17. https://www.mdpi.com/2071-1050/11/13/3496/htm

The Economist (2018, October 27). *The World's economic centre of gravity*. https://www.economist.com/graphic-detail/2018/10/27/the-chinese-century-is-well-under-way

Thornbush, M. J., & Golubchikov, O. (2009). On shaky ground: Arctic communities in uneasy transition to a new climatic order. In D. M. Ferrari & A. R. Guiseppi Eds., *Geomorphology and plate tectonics* (pp. 85–96). Nova Science. (ISBN 978-1607410034).

Vinokurov, E., Lobyrev, V., Tikhomirov, A., Rakhimov, K. K., & Tsukarev, N. (2018). *Silk road transport corridors: Assessment of trans-EAEU freight traffic growth potential* (p. 70). Eurasian Development Bank (EDB), Centre for Integration Studies. (in Russian). https://eabr.org/en/analytics/integration-research/cii-reports/

Main structural projects in the Siberian region (2019). (in Russian). http://cdnimg.rg.ru/pril/article/103/71/66/970_12.gif

Makarov, I. A., & Sokolova, A. (2016). The Eurasian Economic Union and the silk road economic Belt: Opportunities for Russia. *International Organizations Research Journal*, *11*(2), 40–57. http://doi.org/10. 17323/1996-7845-2016-02-40

Martynov, V. L. (2008, September 9). *Military geography at the beginning of the XXI century*. Geography. Appendix to the newspaper. (in Russian). https://geo.1sept.ru/article.php?ID=200800904

Menshikov, S. (2007, September 28). *The Bering Strait megaproject: Political and economic aspects*. Slovo. (in Russian). http://www.fastcenter.ru/smenshikov/slovo/smmslovo232.htm

Migration Profile: Afghanistan 2014. (2015). *Prepared for the International Organization for Migration (IOM) by Katrin Marchand Melissa Siegel Katie Kuschminder Nassim Majidi Michaella Vanore Carla Buil International Organization for Migration* (p. 287). https://afghanistan.iom.int/sites/default/files/Reports/afghanistan_migration_profile.pdf

Miholjcic, N. (2019). *Implications of Sino-Russian Rapprochement for Central Asia*. Institute for War & Peace Reporting (IWPR). Central Asian Bureau for Analytical Reporting (CABAR). https://cabar.asia/en/ implications-of-sino-russian-rapprochement-for-central-asia/

Plyusnin, Y. M. (2015). Potential of the middle development corridor «The Arctic – Central Eurasia». In A. V. Vorobiev, K. K. Rakhimov, & A. D. Sobyanin Eds. *Different look/STEC: System of transport Eurasian corridors/ Comp* (pp. 495–499). Center for Strategic Market Conditions. (in Russian). http://conjuncture.ru/book-stec-2015

Rakhimov, K. K. (2015). Railway to China – Civilizational choice of Kyrgyzstan against Russia and Kazakhstan. In A. V. Vorobiev, K. K. Rakhimov, & A. D. Sobyanin Eds. *STEC: System of transport Eurasian corridors/Comp* (pp. 304–313). Center for Strategic Market Conditions. (in Russian). http://conjuncture.ru/book-stec-2015

Ryskulov, D. M. (2015). Trans-Asian trade route world economy. In A. V. Vorobiev, K. K. Rakhimov, & A.D. Sobyanin Eds., *STEC: System of transport Eurasian corridors/Comp* (pp. 468–494). Center for Strategic Market Conditions. (in Russian). http://conjuncture.ru/book-stec-2015

Sazonov, S. L., & Tzu, U. (2019). PRC railway transport. In S. G. Luzyanin Ed., *Development imperatives* (p. 408). Insitut Far East RAN. (in Russian).

Shehryar, K., & Guijian, L. (2018, November). The China–Pakistan Economic Corridor (CPEC): Challenges and prospects. *Area Development and Policy*, *4*(4), 466–473. http://doi.org/10.1080/23792949.2018.1534549

Shustov, A. V. (2011). *There will be more blood in Central Asia than in Egypt, Postsovet, Blog 'Central Asia'*. (in Russian). http://www.postsovet.ru/blog/asia/67890.html

Slinkin, M. F. (2003). Afghanistan: Pages of history (80–90s of XX century). In: Tomsk State University (Ed.), *Culture of the peoples of the Black Sea* (Vol. 41; pp. 201). TSU. (in Russian).

SPb (1916). *Map of railways of the Russian Empire*. (in Russian). http://andcvet.narod.ru/DR/12/max/1916.jpg

Statistica qo'mitasi. (2019). *Demographic situation*. https://www.stat.uz/en/press-center/news-committee/6429-34634634634

Tajikistan Population. (2019). https://countrymeters.info/en/Tajikistan

Tao, S., Liu, W., Liu, Z., & Wuzhati, Y. (2019). Policy mobilities and the China model pairing aid policy in Xinjiang. *Sustainability*, *11* (13), 1–17. https://www.mdpi.com/2071-1050/11/13/3496/htm

The Economist (2018, October 27). *The World's economic centre of gravity*. https://www.economist.com/graphic-detail/2018/10/27/the-chinese-century-is-well-under-way

Thornbush, M. J., & Golubchikov, O. (2009). On shaky ground: Arctic communities in uneasy transition to a new climatic order. In D. M. Ferrari & A. R. Guiseppi Eds., *Geomorphology and plate tectonics* (pp. 85–96). Nova Science. (ISBN 978-1607410034).

Vinokurov, E., Lobyrev, V., Tikhomirov, A., Rakhimov, K. K., & Tsukarev, N. (2018). *Silk road transport corridors: Assessment of trans-EAEU freight traffic growth potential* (p. 70). Eurasian Development Bank (EDB), Centre for Integration Studies. (in Russian). https://eabr.org/en/analytics/integration-research/cii-reports/