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Mastering Imperial Space?

The Ambivalent Impact of Railway-Building in Tsarist Russia

Until recently, comparative historical research on European empires has mainly focused on the question of how the different imperial elites addressed the problem of political rule over a variety of ethnic, religious, and cultural groups in the nineteenth century. The strategies that were developed and deployed in the Ottoman, the Habsburg, and the Russian empires to exert control over their large and expanding territories have not been analysed in comparable depth so far. 2 In Tsarist Russia, which in the late nineteenth century constituted the largest continental empire in the world, the consolidation of imperial space seemed to be an issue of special concern. "Russia suffers from its geographical magnitude;' Tsar Nicholas I once complained.³ This statement pointed not only to the large distances separating the capital of St. Petersburg from the imperial peripheries but also to the poor condition of Russian roads and waterways. When news of the first public railway in Western Europe reached St. Petersburg in the 1820s, progressive scholars and engineers soon argued that Russia with her underdeveloped network of communications and her "vast territorial extension" almost begged for the construction of railways. 4 Pavel Mel'nikov, a young Russian engineer and later Russia's first Minister of Communications, enthusiastically exclaimed in 1838 that the railways had been "invented for Russia more than for any other country in Europe." 5

1. Infrastructures: an Object of Imperial History

For a long time, historians have been treating the history of infrastructures primarily from the perspective of economic history. 6 At the same time it has been often overlooked that railways in nineteenth-century empires were also constructed for political and strategic purposes. This holds especially true for Tsarist Russia. After the defeat in the Crimean War, Tsar Alexander II gave the green light to construction of a network of railways in European Russia in 1857 primarily out of strategic considerations. Apart from two trunk lines connecting St, Petersburg with Moscow and Warsaw with Vienna, Russia had not constructed any major public railways before the outbreak of the war against France, England and the Ottoman Empire in 1853.⁷ The difficulties of supplying the fortress of Sevastopol at the southern frontier with troops and provisions and the disgraceful defeat against the European powers on home territory highlighted the urgent need to develop and modernize Russia's infrastructures. Whereas before the Crimean War the transport policy of Nicholas I had been influenced mainly by traditionalists and proponents of canal and road construction, his successor Alexander II gave his support to the competing ideological camp of railway enthusiasts. On January 26, 1857 the Tsar-reformer issued a decree calling the construc-

¹ For the state of the art in contemporary historiography on the Russian Empire: R Vulpius, "Das Imperium als Thema der Russischen Geschichte", *Zeitenblicke* 6 (2007) 2, URL: http://www.zeitenblicke.de/2007/2/vulpius/index_html (24.12.2007).

² F. B. Schenk, "Imperiale Raumerschließung: Beherrschung der russischen Weite", Osteuropa 3 (2005), 33-45. New scholarship stresses the importance of "territoriality" for the understanding of polities such as the Russian Empire: J. Burbank and M. von Hagen, "Coming Into the Territory: Uncertainty and Empire", in Russian Empire. Space, People, Power. 1700-1930, ed. idem, A. Remnev (Bloomington, 2007), 1-29, 5, 21. On the concept of "territoriality" in general: C. S. Maier, "Consigning the Twentieth Century to History", American Historical Review 105 (2000), 807-831, 819-821. On the impact of modern technology on imperial rule in colonial empires: D. Headrick, The Tools of Empire. Technology and European Imperialism in the Nineteenth Century (Oxford, 1981); D van Laak, Imperiale Infrastruktur. Deutsche Planungen für die Erschließung Afrikas 1880 bis 1960 (Paderborn, 2004), 35-43.

³ R. M. Haywood, The Beginnings of Railway Development in Russia in the Reign of Nicholas I. 1835-1842 (Durham, 1969), 230.

⁴ One of the first proposals for the construction of a public railway in Russia was formulated by N. P. Shcheglov, 0 zheleznykh dorogakh i preimushchestve ikh nad obyknovennymi dorogami i kanalami (St Petersburg, 1830), 5.

⁵ P. P. Mel'nikov, "Svedeniia o russkikh zheleznykh dorogakh': in *P. P. Mel'nikov. Inzhener, Uchenyi, Gosudarstvennyi deiatel*; ed. Ivi. I. Voronin et al. (St Petersburg, 2003), 223-398, 276.

⁶ M. Beaumont and M. Freeman, "Preface", in *The Railway and Modernity. Time, Space, and the Machine Ensemble,* ed. idem (Oxford, 2007), 7-11, 9. Two Russian publications confirming this observation: E. Ia. Kraskovskii, ed., *Istoriia zheleznodorozhnogo transporta Rossii,* vol. 1: 1836-1917 (St Petersburg, 1994); A. M. Solov'eva, *Zheleznodorozhnyi transport Rossii wo vtoroi polovine XIX v* (Moscow, 1975). - On new methodological approaches in the historiography of infrastructures: D. van Laak, "Infra-Strukturge-schichte': *Geschichte und Gesellschaft 27* (2001), 367-393; J. I. Engels and J. Obertreis, "Infrastrukturen in der Modeme: Einführung in ein junges Forschungsfeld", *Saeculum. Jahrbuch für Universalgeschichte* 58 (2007), 1-12.

⁷ Kraskovskii, Istoriia zheleznodorozhnogo transporta Rossii, vol. I, 75.

tion of a network of railways in European Russia a "national endeavour" and the expression of the "common wish." 8

The idea to supply Russia with a functioning and effective network of railways confronted the economically backward country with great difficulties. Large distances had tobe bridged, and in the early phase of railway construction all the necessary technical equipment had tobe imported from Western Europe. Besides private investors both from Russia and abroad, the Tsarist government was also an important player in the field of railway-building throughout the nineteenth century. The state kept an eye on plans and concessions for new railways, offered private entrepreneurs fixed bonus rates for their invested capital, and became itself a major investor in important trunk lines. Especially when a railway seemed to be of great strategic and military importance, the government mobilized state funds to cover the costs of construction and operation. For example, the three trans-continental lines, the Trans-Caspian, the Trans-Siberian, and the Orenburg-Tashkent Railways, were entirely financed by the Tsarist government. 9

Despite the fact that the Russian Empire initially was not among the avant-garde in railway construction in Europe, in the last decades of the nineteenth century the country's network of railways grew rapidly.10 Whereas in the period between 1857 and the end of the 1880s railways were mainly built in the European part of the realm, the Asian periphery was connected with the Russian heartland in the 1890s and later. In 1900 Russia already possessed the second largest network of railways in the world - a fact that reflected more the length of railway lines in operation than the density

of the entire network, which of course remained rather low in comparison, for example, with the German or the Habsburg Empire. 11

2. Railways: an Instrument of Imperial Rule

The network of railways contributed significantly to the economic progress of the Tsarist Empire, especially in the era of rapid industrialization in Russia after 1890. However, the new means of communication was not only an important tool to boost commerce and the development of Russia's heavy industry. Steam engines and trains were used by the Tsarist regime from the very beginning as instruments of imperial rule. The validity of this thesis may be illustrated with four examples.

First, the Russian railways played an important role as a means of transportation for troops and prisoners from one part of the country to the other. Among the first official documents regulating traffic on the railway from St. Petersburg to Moscow were the instructions for the relocation of detainees and soldiers in the 1850s. 12 Nicholas I was fascinated by the idea of using the railways for the quick relocation of his army in order to suppress internal political revolts. The Austrian engineer and entrepreneur Franz Anton von Gerstner, who tried to convince the Tsar in 1835 of the necessity of a network ofrailways in European Russia, highlighted in his memorandum of January 6 that England had successfully used the railway from Manchester to Liverpool for the transport of troops to contain a revolt (bezpokoistvie) in Ireland.13 This was obviously meant as an allusion to the events of the November Uprising in the Polish Kingdom in 1830-31. Gerstner stressed that a railway between Moscow and St. Petersburg would enable the government to transfer large army units from one city to the other within two days. Another railway connecting the river Volga with Moscow would substantially facilitate the supply of troops in the capital. 14

From the moment Russia's first overland railways were inaugurated they were used by the regime to consolidate its power within the empire's borders

⁸ Ukaz "O sooruzhenii pervoi seti zheleznykh dorog v Rossii" in *Polnoe Sobranie Zakonov Rossiiskoi Imperii. Sobranie vtoroe*, vol. XXXII: *Otdelenie pervoe. 1857* (St Petersburg, 1858),no. 31448, 72-92, 73.

⁹ On the Trans-Caspian Railway (1880-1888): W. E. Wheeler, "The Control of Land Routes: Russian Railways in Central Asia'; Journal of the Royal Central Asian Society 21 (1934), 585-608; D. W. Spring, "Railways and Economic Development in Turkestan Before 1917", in Russian Transport. A Historical and Geographical Survey, ed. L. Symons and C. White (London, 1975), 46-74; Z. K. Akhmedzhanova, Zheleznodorozhnoe stroitel'stvo v srednei Azii i Kazakhstane (konets XIX - nachalo XX v.) (Tashkent, 1984), 17-24; On the Trans-Siberian Railway (1891-1903): S. Marks, Raad to Power. The Trans-Siberian Railway and the Colonization of Asian Russia, 1850-1917 (Ithaca, 1991); J. de Cars and J.-P. Caracalla, Die Transsibirische Bahn. Geschichte der längsten Bahn der Welt (Zurich, 1987); On the Orenburg-Tashkent Railway (1900-1906): Akhmedzhanova, Zheleznodorozhnoe stroitel'stvo v srednei Azii, 29-32; S. N. Abashin, ed., Tsentral'naia Aziia v sostave Rossiiskoi imperii (Moscow, 2008), 144.

¹⁰ J. M. Westwood, A History of Russian Railways (London, 1964); Haywood, The Beginnings of Railway Development; idem, Russia Enters the Railway Age, 1845-1855 (New York, 1998); Solov'eva, Zheleznodorozhnyi transport Rossii; Kraskovskii, Istoriia zheleznodorozhnogo transporta Rossii, vol. 1

¹¹ H.-D. Löwe, "Von der Industrialisierung zur ersten Revolution 1890 bis 1904", in *Handbuch der Geschichte Rußlands*, vol. 3/1, ed. G. Schramm (Stuttgart, 1983) 203-335, 224; B. R. Mitchell, *European Historical Statistics* 1750-1970 (New York, 1976), 584.

¹² Glavnoe Upravlenie Putei Soobshcheniia i Publichnykh Zdanii, Polozhenie o perevozke arestantov po S.-Peterburgo-Moskovskoi zheleznoi doroge, Utv. 16. 07. 1853 (St Petersburg, 1853); Polozhenie o perevozke bashkirskikh 4-go i 3-go polkov po S.-Peterburgo-Moskovskoi zheleznoi doroge iz Moskvy v S.-Peterburg v ianvare 1855 goda, Utv. 22. 11. 1854 (St Petersburg, 1854).

¹³ Krasnyi Arkhiv 3 (1936) 76, 90.

¹⁴ Krasnyi Arkhiv 3 (1936) 76, 92.

and beyond. In 1849 Nicholas 1, the 'gendarme of Europe', moved his loyal troops from Warsaw to Vienna via railway to contain the revolution in Hungary.15 In 1863 the railway between St. Petersburg and Warsaw enabled the autocratic regime to quickly dispatch guard regiments to the Western provinces and the Polish Kingdom to curb the January Uprising.16 In the aftermath of the first Russian Revolution of 1905, the Trans-Siberian Railway carried the infamous punitive battalions of the generals Paul von Rennenkampf and Alexander Meller-Zakomel' sky to the Far East, where they restored the autocratic regime with brutality in the so-called 'Chita republic' and other regions that had been in turmoil. 17 In peacetime, the network of Russian railways helped the Ministry of War to relocate troops from one part of the countryto the other. In 1875 approximately 1.6 million soldiers travelled the Russian railways.18 In 1912 this number reached 8.6 million. These figures, of course, rose rapidly in war time. In 1878, during the Russian-Ottoman war, railway statistics registered 7.5 million army passengers. In 1905, in the context of the military conflict with Japan, this number reached 11.8 million.19

Second, railways served as an important tool to strengthen Russia's external borders against potential aggressors from outside and to prepare for further territorial expansion. The history of the Great Siberian Railway (*Velikii Sibirskii Put'*) is a good example. Alexander III ordered the statefunded construction of the trans-continental railway in 1891 primarily for strategic reasons. Reports from the governor-generals in Irkutsk and the Amur region in 1886, informing the Tsar about an increasing incursion of Chinese migrants into the provinces of Russia's Far East and about the disconcerting activities of England in this region, alarmed the Russian em-

peror. 20 The decision to finally start the construction of the langest railway in the world put an end to an intense public debate, also conducted within the Tsarist administration, questioning the necessity of, and discussing various options for, establishing a railway connection between Siberia and the Russian heartland. In the end the emperor's fear concerning the vulnerability of Russia's possessions in the Far East proved to carry more weight than the warnings of conservative advisers who kept stressing that the gigantic venture would min the empire's finances. While planning the layout of the line from the Urals to the Pacific, for financial reasons the idea was born in St. Petersburg to build the last section of the railway through Manchuria, on Chinese territory. The plan to build the Chinese Eastern Railway (CER) imbued the project of the Trans-Siberian Railway with a clear imperialistic quality.21 Whereas the Minister of Finance Sergei Witte regarded the link through Manchuria primarily as an instrument of 'peaceful' economic penetration into China, the CER gave occasion to colonial and expansionist fantasies for the Minister of War, the Minister of the Imperial Navy and, last but not least, for Tsar Nicholas II himself.22 The CER was Russia's contribution to the European game of railway imperialism in Asia and an important reason for the worsening of Russia's relations with England and Japan at the beginning of the twentieth century. 23

Third, railways in the Russian Empire were envisioned from the very beginning as a tool of territorial consolidation and cultural homogenization. The idea that the steam engine might help 'reduce' the country's vast territorial expanses and thereby facilitate political control in the large empire was introduced into the Russian railway discourse in 1835 by Franz Anton von Gerstner. The Austrian entrepreneur argued that

"in no other country of the earth [the construction of) railways seems to be as profitable (vygodno) and necessary (neobkhodimo) as in Russia, because they diminish great distances with the help of fast movement. Only when the orders (poveleniia) of the ruler are

¹⁵ M. Annenkov, "Voennaia sluzhba zheleznykh dorog", *Voennyi sbornik* 19 (1876), 112-142, 115-116; Regierungsrat Wernekke, "Die Mitwirkung der Eisenbahnen an den Kriegen in Mitteleuropa': *Archiv für Eisenbahnwesen* 35 (1912), 930-958, 930; W. Baumgart, "Eisenbahnen und Kriegsführung in der Geschichte", *Technikgeschichte* 38 (1971), 191-219, 202.

¹⁶ L. G. Zakharova, ed., Vospominaniia general-fel'dmarshala grafa Dmitriia Alekseevicha Miliutina. 1863-1864 (Moscow, 2003), 46, 54-58.

¹⁷ A. P. Korelin and S. V. Tiutiukin, eds., *Pervaia revoliutsiia v Rossii. Vzgliad cherez stoletie* (Moscow, 2005), 381-382; L. Trotzki, "Ergebnisse und Perspektiven", in idem, *Ergebnisse und Perspektiven. Die permanente Revolution* (Frankfurt/Main, 1971), 43.

¹⁸ Statisticheskii sbornik Ministerstva putei soobshcheniia, no. 15 (St Petersburg, 1887), Tab!. VI. For the year 1875 the statistics give only one figure for both soldiers and prisoners: 1.892 million. If we assume that in this year the number of detainees who travelled the Russian railways was approximately the same as in 1879 (231,000), we can deduce for 1875 the number of 1.66 million soldier-passengers on Russian trains.

¹⁹ Statisticheskii sbornik Ministerstva putei soobshcheniia, no. 131, vol. 2-3, VII and Tabl. VII (St Petersburg, 1915); no. 15, Tabl. VI.; no. 89 (St Petersburg, 1907), Tabl. VII.

²⁰ Marks, Road to Power, 94; Cars and Caracalla, Die Transsibirische Bahn, 25-26.

²¹ R. E. Gladfelter, "Russia, the Soviet Union, and the Chinese Eastern Railway", in Railway Imperialism, ed. D. C. Baldwin and K. E. Wilburn (New York, 1991), 137-154; C. Divall, "Railway Imperialisms, Railway Nationalisms", in Die Internationalität der Eisenbahn. 1850-1970, ed. M. Burri (Zurich, 2003), 195-209, 205; R. Lee, "Railways and Imperialism", in Working Papers in Railway Studies 5 (1999), 4; S. Urbansky, Kolonialer Wettstreit. Russland, China, Japan und die Ostchinesische Eisenbahn (Frankfurt/Main, 2008).

²² D. Schimmelpenninck van der Oye, Toward the Rising Sun. Russian Ideologies of Empire and the Path to War with Japan (DeKalb, 2001), 75.

²³ F. B. Schenk, "Kommunikation und Raum im Jahr 1905: Die Eisenbahn in Krieg und Revolution", in Russland 1905. Perspektiven auf die erste Revolution im Zaren reich, ed. M. Aust and L. Steindorff (Frankfurt/Main, 2007), 47-67, 50-57.

submitted by railway from St Petersburg to Kazan or Odessa within three days, will the good deeds (*blagodeianiia*) conceived by his majesty for his subjects have the intended impact in such an immeasurably big country (*neizmerimaia strana*)."²⁴

Gerstner was an admirer of railway construction in the United States. He tried to convince the Russian emperor and the Tsarist administration that

"the railways are as important for Russia as they are for North America: there the inhabitants have understood that the two most powerful enemies of the Union are space and time and that both can be subdued only by railways; railways can serve also here [i.e. in Russia] both as an iron and a golden chain binding together the parts of the truly immense empire."25

Despite the fact that Gerstner was not able to realize his plans for a railway network in European Russia, his appreciation of the impact that this new means of communication should have on Russia's territorial cohesion remained a strong element in the political discourse of the following decades. Throughout the second half of the nineteenth century the debate on railway construction in Russia was dominated by voices stressing the importance of steam engines and railway tracks for the consolidation of Russia's territorial unity. Mikhail Katkov, an admirer of German railway policy, in 1883 proclaimed in the newspaper *Moskovskie vedomosti* that "after the bayonet, it is the railways that consummate national cohesion." ²⁶

When dreams to explore Russia's Asian provinces with the help of railways were transformed into feasible projects in the last third of the nineteenth century, engineers and administrators in the Ministry of Communications believed that the steam engines would not only bring economic wealth to the imperial peripheries, but also spread the sparks of civilization in these regions and, thereby, strengthen the economic and cultural bonds with the European centre. In the 1850s, Russian railway enthusiasts, who developed utopian projects envisioning the "reduction of the distance between Europe and Central Asia (sblizhenie srednei Azii i Evropy);' proclaimed:

"It is an indisputable truth: where a region is explored by railways, we observe tidiness, refined manners, cleanliness, order, comfort and virtuousness [...] we detect the dawn of new regional wealth; new fields of activity and economic initiative are opened up for dili-

- 24 Krasnyi Arkhiv 3 (1936) 76, 92.
- 25 F. A von Gerstner, über die Vortheile der Anlage einer Eisenbahn von St. Petersburg nach Zarskoe-Selo und Pawlowsk, deren Ausführung durch eine Akziengesellschaft mit Allerhöchstem Privilegium Seiner Kaiserlichen Majestät statt findet (St Petersburg, 1836), 65.
- 26 Moskovskie vedomosti, 4. 8. 1883, cit.: V. A. Tvardovskaia, *Ideologiia poreformennogo samoderzhaviia*. M. N. Katkov i ego izdaniia (Moscow, 1978), 79. English Translation: R. Wortman, Scenarios of Power. Myth and Ceremony in Russian Monarchy. Pram Peter the Great to the Abdication of Nicholas II. New Abridged One-Volume Paperback Edition (Princeton, 2006), 300.

gent men; here we have enlightenment and the arts which disperse their blessings to all strata of the human family:'27

About fortyyears later, in November 1892, Minister of Finance Witte, one of the moving forces behind the Trans-Siberian Railway, argued in a report to Tsar Alexander III that "despite the fact that Siberia had been [for a long time] an integral part of Russia (*chast' Rossii*), it had not benefited from the country's civil (*grazhdanskie*), cultural and economic successes so far." The new transcontinental railway would not only reduce the distance between Siberia and European Russia (*priblizit'*), but also accustom the region to "Russian life". ²⁸

Russian railwaymen, sent to the Asian peripheries to build and operate the trans-continental railways, were envisioned as agents of Russia's civilizing mission in the East. ²⁹ In the 1890s and later these envoys of European culture were supposed to be supported by peasant colonists who were to be transferred from overpopulated areas in the Western and central provinces to the virgin lands of Siberia and Central Asia in order to strengthen the Russian element in these regions. ³⁰ Indeed, for the period after 1893 the statistics of the Russian Ministry of Communications report growing numbers of railway passengers travelling eastwards as rural colonists. In 1900 this number reached one million. The movement of colonists to the Eastern provinces reached its peak in 1907 with 3.5 million *pereselentsy*. ³¹ Between 1891 and 1914 the Trans-Siberian Railway helped transfer about five million Ukrainian, Belorussian, and Russian colonists to the virgin lands in the vast expanses: to the 'promised land' of Siberia. ³²

Fourth, railways that were planned and constructed primarily for economic reasons can also be regarded as instruments of imperial rule. Plans to explore the periphery of the empire with the help of railways were recurrently perceived by representatives of the local elite as an attempt of the im-

²⁷ G. Liubanskii, Sblizhenie Srednei Azii i Evropy pomoshch'iu zheleznykh dorog (St Petersburg, 1858), 4.

²⁸ S. Iu. Vitte, "Vsepoddanneishii doklad upravliaiushchego ministerstva finansov o sposobakh sooruzheniia Velikogo Sibirskogo Zheleznodorozhnogo puti i o naznachenii soveshchaniia dlia obsuzhdeniia sego dela. 6 noiabria 1892 g." in idem, Sobranie sochinenij i dokumental'nykh materialov v piati tomakh, vol. 1 Puti soobshcheniia i ekonomicheskoe razvitie Rossii, book 2, part 1 (Moscow, 2004) 159-183, 160.

^{29 &}quot;Vesti iz Sibiri", Zheleznodorozhnoe de/o 9 (1890), 317-318, 317.

³⁰ Vitte, "Vsepoddanneishii doklad". 161-163, 173; W. Sunderland, "The 'Colonization Question': Visions of Colonization in Late Imperial Russia", *Jahrbücher für Geschichte Osteuropas* 48 (2000), 210-232, 221-224.

³¹ Statisticheskii sbornik Ministerstva putei soobshcheniia, no. 81 (St Petersburg, 1905), Tab!. VII; no. 113 (St Petersburg, 1912), vol. 2, Tab!. VII.

³² Marks, Road to Power, 155.

perial centre to exploit the wealth of the periphery in a colonial manner. The resistance of the so-called Siberian 'regionalists' led by Nikolai Iadrintsey and Gregorii Potanin against the construction of the Great Siberian Railway at the end of the 1880s is widely known.33 They argued that this gigantic project would only help the imperial centre to exploit the region's natural resources and, thus, consolidate Siberia's inferior status as one of Russia's colonies. At the same time, they warned that the positive impact of the railway on the economic development of Siberia would be almost negligible. Instead of connecting the Urals and the Pacific with a trans-continental trunk line, it would be better to first link Siberia's regional centres with one another. Only after Siberia had caught up with European Russia in terms of economic development should both parts of the empire be connected through modern infrastructure. Critical remarks of this kind remained, of course, unheard in the capital. Far from being inclined to heed the advice of the Siberian opposition, St. Petersburg saw the emergence of regionalist tendencies on the periphery as an alarming signal of separatism, underlining the urgent need to tie Siberia more tightly to European Russia with the iron chains of a trans-Siberian railway. 34

All of these examples illustrate that the construction of railways in the Russian Empire contributed significantly to the consolidation of autocratic rule within the borders of the realm. If we try to identify the centripetal forces that helped strengthen Russia's territorial integrity before the First World War, the network of the empire's railways, which connected the imperial centre with its peripheries, has tobe at the top of the list. However, this is only one part of the story. Apart from the impact of railways on the consolidation of Russia's territoriality, one has to take into account the fact that the introduction of new means of transportation and communication also had unintended side-effects and contributed to processes of political destabilization and territorial disintegration.

3. Railways and the Destabilization of Power

There is no doubt that the construction of railways in Tsarist Russia did more than strengthen autocratic rule in the largest continental empire. The new means of communication confronted the regime with a variety of new challenges and dangers. These resulted, on the one hand, from the specific circumstances of building large-scale infrastructure in the vast expanses of the Russian Empire, and, on the other hand, from a variety of distinctive features of railways as a modern means of communication and transportation.

First, as already mentioned, the construction of railways in Imperial Russia was a highly expensive endeavour. The Romanovs ruled an empire that was not only large but also economically underdeveloped. In contrast to the USA, where the construction of a nation-wide railway network was realized by private agents of the market economy, the Russian Empire, still retaining socio-economic structures of feudalism, could not rely on similar financial resources and institutions. The most important problem of railway-building in the Tsarist Empire from the very beginning was the lack of sufficient (private) capital. That is why many of Russia's strategic railways and all the important trans-continental trunk lines were state projects funded with credit, a fact that was increasingly detrimental to the financial standing of the empire. The construction of the Trans-Siberian Railway, connecting the city of Chelyabinsk in the Western Urals with Vladivostok at the Pacific and the colonial harbour of Dal'nyi on the Liaodong peninsula, absorbed the gigantic sum of 1.5 billion roubles - five times more than originally planned. Between 1891 and 1914, seven to eight per cent of the annual state budget was invested in the construction and operation of the trans-continental railway.35 Many contemporaries argued that the defence of Russia's interests in the Far East was not worth such a large financial investment. In contrast to the perception in Western European and North American countries, where the Trans-Siberian Railway from the very beginning nourished one of the strongest railway myths in history, there was little enthusiasm among the Russian public, for instance when the country 'celebrated' the tenth anniversary of the laying of the foundation stone in 1901,36 Even at the time many realized that consolidating the empire's vast and expanding territory in Asia with the help of expensive railway networks meant that the development of the infrastructure in the European part of the country would receive less fi-

³³ E. Iu. Petri, "O narodonaselenii Sibiri i o Velikoi Vostochnoi zheleznoi doroge", Zheleznodorozhnoe delo 7 (1888), 267-283, 267-274; W. Faust, Russlands goldener Boden. Der sibirische Regionalismus in der zweiten Hälfte des 19. Jahrhunderts (Cologne, 1980), 342, 394-397.

³⁴ Marks, Raad to Power, 54. On late imperial colonization in general: F.-X. Coquin, La Siberie. peuplement et immigration paysanne au XIXeme siede (Paris, 1969); D. W. Treadgold, The Great Siberian Migration. Government and Peasant in Resettlement from Emancipation to the First World War (Princeton, 1957); B. A. Anderson, Interna/Migration during Modernization in Late Nineteenth-Century Russia (Princeton, 1980); L. M. Goryushkin, "Migration, Settlement, and the Rural Economy of Siberia, 1861-1914", in The History of Siberia. From Russian Conquest to Revolution, ed. A. Wood (New York, 1991), 140-157; D. Moon, "Peasant Migration and the Settlement of Russia's Frontiers, 1550-1897", The Historical Journal 40 (1997), 859-893.

^{35 1} V. Lukoianov, "Velikaia Sibirskaia zheleznaia doroga i KVZhD" in S. Iu. Vitte, Sobranie sochinenii i dokumental'nykh materialov, vol. 1, book 2, patt 1 (Moscow, 2002), 123-158, 130; Marks, Raad to Power, 215.

³⁶ D. Destrem, "Obzor otzyvov pechati po povodu desiatiletiia Velikogo Sibirskogo rel'sovogo puti", *Zheleznodorozhnoe delo* 21 (1902), 27-29, 64-67, 79-80.

nancial resources. ³⁷ Representatives of the Ministry of War, for example, had been complaining since the 1870s that Russia's Western borderlands were in urgent need of more strategic railways connecting the empire's periphery with its core, a doomed plea given the administration's commitment to railway construction in Siberia and Central Asia. ³⁸

Not only the construction but also the operation of Russia's expanding network of railways demanded increasing subsidies from the state. This resulted partly from the fact that many lines had been constructed primarily for strategic and military purposes and had never been envisioned as economically self-supporting. Except for the five years between 1895 and 1899, the Russian railways did not yield a profit for the government but rather contributed to the increasing deficit of the state budget. In 1907, for instance, the Tsarist administration had to invest about 120 million roubles in the empire's railway system. Witte, who had been the country's first prime minister in the years 1905-06, in 1910 laconically stated the lack of profitability of the country's railways: "If strategic and political factors did not play such an important role in the planning of our railway system and if - like in the USA - economic considerations prevailed, not only the layout of the network would look different but the entire system could probably be operated efficiently, or at least the respective financial deficit would be smaller." ³⁹

Second, beyond the expense of providing the largest continental empire with an effective railway network, the operation of the expanding railway system confronted the Ministry of Communications in St. Petersburg with steadily aggravating difficulties. There is no doubt that the reputation of Russia's railways suffered increasingly from the sharp criticism of its commercial and private customers. The annually growing number of complaints in the archive of the Russian Ministry of Communications between 1909 and 1913 indicate declining consumer satisfaction, and disastrous everyday conditions on Russia's trains and in railway stations. ⁴⁰ There is one term that clearly dominated public discourse on railways in Tsarist Russia in the second half of the nineteenth century: *bezporiadok* - chaos. Of course there

were many reasons for the lack of efficiency of the railway system, and the magnitude of the empire's territory was only one, but it was an important factor in this regard.

When the railways were urgently needed to defend Russia's political and strategic interests, the system's lack of reliability became a vital problem. This was more than obvious during Russia's war against Japan, which was decided to a large extent on the tracks of the Trans-Siberian Railway. Japan chose to attack the Russian fleet in Port Arthur in February 1904, when the transport capacity of the Siberian railway was extremely low and Lake Baikal was still covered with thick ice, impeding the transfer of Russian troops by boat from the Western to the Eastern shores. 41 The section of the Trans-Siberian Railway along the southern shores of the lake had not been finished because of extremely difficult geographical circumstances. At the time of the Japanese attack the Tsarist army was, therefore, confronted with almost insurmountable logistic difficulties. Even after the Ministry of Communications had built a temporary railway across the frozen Lake Baikal, enabling the army to start the transfer of mobilized troops to the Far East, and even after the completion of an uninterrupted railway line from the Urals to the Pacific, the Trans-Siberian Railway remained the critical requisite for the transport of Russia's provisions during the whole war. For financial reasons, the line had been constructed single-tracked and was not particularly strong. 42 Both factors entailed a worryingly low transport capacity for a line that had once been planned and envisioned as a powerful instrument to protect the strategic interests of the Tsar in the Far East. It came as no surprise that after Russia's military defeat by Japan, the army command tried to blame the Ministry of Communications for the military fiasco. However, this was apparently also an attempt to distract the critics from the military's own strategic mistakes and shortcomings during the war. 43

Third, it is difficult to assess how much the improper management of Russian railwaymen actually contributed to the military defeat of Tsarist Russia by Japan. In any case, the war clearly showed that the empire's infrastructure not only reinforced Russia's territorial integrity, but at the same time became a highly sensitive foundation of the autocratic regime. The

³⁷ W. Sperling, "Die 'Schicksalsfrage' der Kleinstadt: Eisenbahn, Raum und Industrialisierung in der russischen Provinz, 1850-1914", in *Jenseits der Zarenmacht. Dimensionen des Politischen im Russischen Reich*, 1800-1917, ed. W. Sperling (Frankfurt/Main, 2008), 127-161, 156.

³⁸ W. C. Fuller, Strategy and Power in Russia. 1600-1914 (New York, 1992), 29-28, 339, 391,461.

³⁹ S. Iu. Vitte, "Nekotoryia soobrazheniia o prichinakh defitsitnosti russkoi zheleznodorozhnoi seti", *Zheleznodorozhnoe delo 29* (1810), 89-94, 91.

^{40 &}quot;Po zhalobam raznykh lits na upravleniia zheleznykh dorog", Rossiiskii Gosudarstvennyi lstoricheskii Arkhiv (RGIA) f 273, op. 10, d 267 (1909), 352 (1910), 413 (1911), 498 (1912), 554 (1913).

⁴¹ N. K. Struk, "Zheleznye dorogi vostochnoi Sibiri v Russko-iaponskuiu voinu 1904-1905 gg." Sibirskii istoricheskii sbornik (1973), 21-41, 26; F. Patrikeeff and H. Shukman, Railways and the Russo-Japanese War. Transporting War (London, 2007), 50.

⁴² Marks, Raad to Power, 174.

⁴³ B. W. Menning, "Neither Mahan nor Moltke: Strategy in the Russo-Japanese War", in *The Russo-japanese War in Global Perspective*, ed. J. W. Steinberg (Leiden, 2005), 128-156, 145-146; J. Kusber, "Siegeserwartungen und Schuldzuweisungen: Die Autokratie und das Militär im Russisch-Japanischen Krieg 1904/05", in *Der Russisch-Japanische Krieg* (1904/05), ed. J. Kreiner (Göttingen, 2005), 99-116, 113.

more the Tsarist government used the railways as an instrument of imperial rule, the more it became dependent on the smooth functioning of the country's infrastructure. The multinational empire of the Romanovs was already being described by contemporaries as a body whose different parts were connected and sustained by the arteries of the network of railways. This affected both the body's 'head' in St. Petersburg and its 'heart' in Moscow. 44 Accordingly, the people who were in charge of operating the Russian railways and were controlling the 'pulse' of the country's iron arteries bore great responsibility. They suddenly held a previously unknown power, which could easily be exploited politically and used against the autocratic regime.

Russia's administration soon discovered that the steadily growing group of railwaymen controlled a means of communication that could also be converted into a weapon of the regime's opponents. When, in the 1880s, high officials in St. Petersburg raised the idea of setting up a private railway police and entrusting employees of privately owned railway companies with police responsibilities, the Minister of the Interior filed his categorical objection. In the debate of the State Council, Count Tolstoy reminded his colleagues of the January Uprising in Poland in 1863 and the participation of employees of the St. Petersburg-Warsaw railway in the revolt. Some railwaymen, Tolstoy recalled, had openly supported the activities of the Polish insurgents and had thereby inflicted serious damage on the Russian state, instead of defending the empire's political and strategic interests. The gendarmerie of the Russian railways, which had been under the control of the Ministry of Communications in the 1860s, were unable to contain the chaos on the railway from

St. Petersburg to Warsaw. As one of the consequences of these events, in 1867 the surveillance of the railway police was shifted to the newly founded agency of the *shefzhendarmov*, i.e. to the Ministry of the Interior. Tolstoy underscored that the security forces on the Russian railways were not only responsible for the protection of law and order in trains and at stations. They also had to watch over the loyalty and political activities of the employees of railway companies.47 Consequently, the idea entrusting police responsibilities to the railwaymen, which was discussed in the 1880s, was unacceptable to the Minister of the Interior. Such a decision would have been equivalent to setting the fox to keep the geese. For Tolstoy, there was no doubt that Russian railwaymen from both private and state companies had to be supervised by the state and that this was one of the duties of the railway gendarmerie of his administration. ⁴⁸

Towards the end of the nineteenth century it became more and more obvious that employees and workers of Russian railway companies were not only apt to support national liberation movements as they had done in Poland in 1863. They became a coveted target group for socialist and other revolutionary propaganda. Railwaymen were an important group of workers and employees both in terms of quantity and in terms of their key position within the empire's 'nervous system'. Before the First World War, the number of Russian railwaymen reached one million. No other trade union before 1917 was bigger than the railwaymen's organization. Revolutionary groups developed sophisticated plans to infiltrate the ranks of Russian railwaymen in order to intensify political agitation among this group and to gain control of the empire's transport system. In December 1881, for instance, Viacheslav Pleve, the director of the police in the Russian Ministry of the Interior, alerted the administration of the railway gendarmerie in a secret memorandum that members of "social-revolutionary organizations" were planning in the near future to take over a number of restaurants at railway stations in order to use them for their revolutionary aims. As in Romania, where emigre revolutionaries had already employed a similar strategy with some success, Russian activists were planning to use railway restaurants for the funding of their own activities and for political agitation among railway workers and employees. The Russian police had received confidential information about these plans from loyal informants and warned local officers to be particularly alert and attentive.49

⁴⁴ As an early example of organic metaphors in Russian railway discourse cf. P. P. Mel'nikov, "Vsepoddanneishee donesenie o proekte ustroeniia zheleznoi dorogi mezhdu S. Peterburgom i Moskvoi 1841 goda" in *P. P. Mel'nikov*, ed. Voronin and Voronina, 152-176, 176.

^{45 &}quot;Obshchii ustav Rossiiskikh zheleznykh dorog': (St Petersburg, 1885), in *Rossiia. Gosudarstvennyi Sovet. Materialy*, vol. 158 (1885), Russian National Library, St Petersburg, 525. On the punishment of the employees of the St. Petersburg-Warsaw railway who had participated in the Polish uprising of 1863, cf. Gosudarstvennyi Arkhiv Rossiiskoi Federatsii (GARF) f. 109, op. 2a, d. 775, II 1-20b.

⁴⁶ In December 1861 the Governor-General of the North-Western provinces V. I. Nazimov had already warned of the "ambivalent attitude of the administration to the newly opened [St Petersburg-Warsaw] railroad and of the personnel of the line who are almost exclusively Polesand foreigners". Cit. after A. Rieber, "The Debate Over the Southern Line: Economic Integration or National Security", in *Synopsis. A Collection of Essays in Honour of Zenon E. Kohut*, ed. S. Plokhy and F. Sysyn (Toronto, 2005), 371-397, 377. In the 1880s Warsaw Governor-General I. Hurko advocated that Poles should not be employed in the railway sector. Subsequently it was decided to ban Polish staff from the most strategic railway lines, a decision that was difficult to implement as there simply were not enough qualified Orthodox technical and engineering specialists to substitute for the Catholic professionals. A. Chwalba, *Polacy w słuzbie Moskali* (Warsaw, 1999), 214.

⁴⁷ On the history of the Russian railway police: L. Timofeev, *Spravochnaia kniga dlia chinov Zhandarmskikh Politseiskikh Upravlenii zheleznykh dorog po zhandarmsko-politseiskoi chasti. Obshchiia obiazannosti zhandarmskoi zheleznodorozhnoi politsii* (St Petersburg, 1908), 1-3; Z.I. Peregudova, *Politicheskii sysk Rossii* (1880-1917 gg.) (Moscow, 2000), 115-116.

^{48 &}quot;Obshchii ustav Rossiiskikh zheleznykh dorog", 531.

⁴⁹ GARF f. 126, op. 1, d. 23, 1 12.

Towards the end of the nineteenth century Russian railwaymen represented a pressure group that was increasingly difficult to control for the agencies of the Tsarist regime.50 This became apparent during the general strike of October 1905, when the break-down of communications on the Russian railways brought nearly the whole country's economic and social life to a stand-still.51 One may argue that if the railwaymen had not participated in the strike movement of 1905, Nicholas II would probably never have signed the so-called 'October Manifesto', promising the election of a national assembly and civil rights to his subjects. The network of railways in Russia, which had been envisioned from its beginnings as a powerful device in the hands of the Tsarist regime, turned in these days into a weapon in the hands of its political opponents. Oddly enough, the pre-modern political system of autocracy seemed to be more difficult to maintain in an empire with a modern system of infrastructure than it had been before Russia's journey towards modernity began.

Fourth, the construction of railways restricted the power of the Tsar in one more respect. Since the end of the 1870s, Russian security forces had been almost obsessed with the fear of terrorist attacks targeted at the trains of the emperor and his family. Accordingly, they spared neither cost nor effort to control and supervise the railway lines travelled by the Tsar in his luxurious coaches.52 Indeed, terrorist groups soon discovered Russia's railways as the Tsarist regime's sensitive and vulnerable Achilles heel and planned several attacks at the road-beds of rail lines travelled by the despised emperor.53 Already in 1865 the Tsarist authorities were alarmed by confidential reports from the Western borderlands about preparations for an assault on the emperor's train en route from Warsaw to Moscow. In May 1865, the Third Section Of His Imperial Majesty's Own Personal Chancellery reported on a meeting of Polish subjects in the house of a railway guard named Malik, during which the plan to damage the railway tracks before the journey of

Alexander II to Moscow had been discussed.54 In October 1869, a pseudonymous letter informed the police in Elisavetgrad that two young persons had recently settled in the city in order to commit a bomb attack on the train of Alexander 1155 The authorities managed to prevent these assaults, but it was clearly just a matter of time before another political group would seize the opportunity and attempt to assassinate the Emperor when travelling through his country by rail. Terrorists knew that the network of railway lines was difficult for the authorities to control effectively and, therefore, offered an almost ideal site for attacks that needed long and complicated preparations. The fact that the emperor's train also operated by night facilitated the work of the terrorists under cover of darkness. The activists counted on the operation of trains according to schedule, which made it possible to foresee the time of arrival of a train and to plan the destructive explosion a few minutes in advance. The terrorists expected the train's momentum to cause its derailment (if stopped at füll speed), so that the carriages would be completely crushed, 'hopefully' injuring or killing the train's passengers.

The most famous terrorist attack on the imperial train of Alexander II took place on November 19, 1879 near Moscow and was almost 'successful', but hit 'only' the train of the Tsar's court servants. The terrorist organization Narodnaia Volia had laid bombs at two different locations under the railway bed and planted one of their activists as a railway guard in a small village near Odessa. When one of the bombs finally exploded near Moscow, it was only a matter of chance that the Tsar escaped unhurt.56 lt was almost an irony of history that Tsar Alexander was finally killed by a bomb on March 1, 1881 on a carriage ride in St. Petersburg and that the well-known accident of the imperial train on October 17, 1888 near Borki was not the result of a terrorist assault but of the poor condition of the road-bed on the line near Kharkov. Ton the evening of October 17, 1905, when Nicholas II signed the imperial manifesto, transforming Russia into a constitutional monarchy, the Tsar noted in his diary that on this very day Providence had

⁵⁰ R Pethybridge, The Spread of the Russian Revolution. Essays on 1917 (London, 1972), 20.

⁵¹ S. I. Pushkareva, Zheleznodorozhniki Rossii v burzhuazno-demokraticheskikh revoliutsiiakh (Moscow, 1975), 154; Korelin and Tiutiukin, Pervaia revoliutsiia v Rossii, 302; H. F. Reichman, Railwaymen and Revolution. Russia 1905 (Berkeley 1987); D. Dahlmann, "Die gescheiterte Revolution - Russland 1905 bis 1907", in Der Russisch-Japanische Krieg, 117-135, 128-129.

⁵² C. Dietze and F. B. Schenk, "Traditionelle Herrscher in moderner Gefahr: Adlige Handlungsmuster und das Konzept der Sicherheit im späten 19. Jahrhundert", *Geschichte und Gesellschaft* 35 (2009), 368-401.

⁵³ On the history of the 'Achilles heel' metaphor: A Heywood, "'The Most Catastrophic Question': Railway Development and Military Strategy in Late Imperial Russia", in *Railways & International Politics. Paths of Empire 1848-1945*, ed. T. G. Otte and K Neilson (London, 2006), 45-67, 63, FN 2.

⁵⁴ GARF f. 109, op. 2a, d. 788, 1 l-3 ob.

⁵⁵ P. Pomper, Selgei Nechaev (New Brunswick, 1979), 97; idem, "Nechaev and Tsaricide: The Conspiracy Within the Conspiracy". Russian Review 33 (1974), 123-138, 125.

⁵⁶ A. B. Ulam, In the Name of the People. Prophets and Conspirators in Pre-Revolutionary Russia. With a New Introduction by the Author (New Brunswick, 1998), 336-338.

⁵⁷ On the attempt of 1 March 1881: S. S. Tatishchev, *Imperator Aleksandr Vtoroi. Ego zhizn'* i *tsarstvovanie* (Moscow, (1902) 2006), 947-948; H.-J. Torke, "Die Narodniki und Zar Alexander II. (1881). Ein Vorspiel zur Revolution". in *Das Attentat in der Geschichte*, ed. A. Demandt (Cologne, 1996), 251-265; On the train accident of 17 October 1888 near Borki: Wortman, *Scenarios of Power*, 310-311; A. F. Koni, "Krushenie tsarskogo poezda v 1888 godu (Borki-Taranovka)", in idem, *Sobranie sochineniia v 8-mi tomakh*, vol. 1 (Moscow, 1966), 420-495.

saved the Russian monarchy once again - as seventeen years earlier at Borki- from even greater misfortune. 58

4. Conclusion

It is undoubtedly a promising intellectual endeavour to analyse and compare the institutions and mechanisms which helped to consolidate and strengthen political rule in Europe's multinational empires in the nineteenth century. If we look at empires only from the perspective of their collapse and disentanglement, we get a somewhat distorted picture of the modes and rules of political and social life within these complicated state structures, which actually existed quite successfully for several centuries. The ruling elite of the empires repeatedly proved their ability to adopt new modes of political rule and to employ new technologies in order to stabilize the political system in their large multinational countries in the nineteenth century. As previously, the development and application of new tools of imperial rule often resulted from a state of war, or from international competition in the political and economic fields. The Russian defeat in the Crimean War, for example, gave a strong impetus to the development of a railway network in the largest continental empire. As a result, the modernization of the empire's transportation system facilitated the relocation of troops from one part of the country to the other and opened new possibilities for the authorities to suppress both internal political revolts and military attacks from the outside. Moreover, the railways became an important tool of social engineering and economic exploitation in the empire's Asian peripheries. Whereas the administration in St. Petersburg dreamt of a new era of railway colonization in Russia's eastern border-lands, representatives of the regional elite in Siberia warned of the impending exploitation of the country's natural resources.

Notwithstanding the increasing efforts of the Tsarist administration to develop the country's infrastructure, the construction of a satisfying network of railways remained a difficult endeavour. Building and running railways in an empire of this size was both extremely expensive and difficult to manage. In an economically backward country like Russia, the decision to supply the country's Asian peripheries with railway connections meant there was less state money remaining to build strategic railways in the West. As in other countries, the government became increasingly dependent on those social groups who were running the modern system of communications and whose political and economic demands could shatter the autocratic regime

58 A. S. Burdykin, ed., *Dnevnik imperatora Nikolaia II. 1890-1906 gg.* (Moscow, 1991), 239.

to its foundations. But whereas Western democracies managed to partially meet the social demands of the new political forces of industrialized societies and to integrate them into the political debate, the system of autocracy left less room for political manoeuvres and negotiations. Thus, paradoxically, the modernization of Russia's infrastructure to a certain extent increased the vulnerability of the autocratic political regime. This became obvious on the occasion of the terrorist assault against the train of Alexander II in 1879, and during the general strike of October 1905.

The example of railway-building in Tsarist Russia may illustrate that the technical blessings of high modernity were not necessarily compatible with a pre-modern system of imperial rule. A political regime that increasingly depended on the workers and employees of the country's transport system could only count on their loyalty if they were politically and economically satisfied. In the post-national era of the twenty-first century empires have become more than merely a popular object of scholarly analysis. In some regions of the world we can observe a renaissance of imperial thinking and even imperial nostalgia, as, for example, in Russia.⁵⁹ Proponents of such retrospective visions should be reminded how some of the absolutist empires in the nineteenth century were organized politically. Jane Burbank and Mark von Hagen have recently pointed out the fact that the "question of whether empire as a state form is compatible with institutional and ideological democracy is [still] an open one."60 Especially from this perspective one may argue that the democratic nation-state offered European societies at the end of the century an attractive alternative which was, at first glance, more compatible with the demands of high modernity than the empires from the so-called 'good old times'.

⁵⁹ S. Kotkin, "Mongol Commonwealth? Exchange and Governance Across the Post-Mongol Space", *Kritika. Explorations in Russian and Eurasian History* 8 (2007) 3, 487-531, 491, 509, 529.

⁶⁰ Burbank and von Hagen, "Coming Into the Territory", 25.