

**The Logistical Significance of the Turkish Straits, Russo–Ottoman War and
Gallipoli Campaign in Imperial Russia’s Great War, 1914–1917¹**

A.J. Heywood
Department of History
School of Divinity, History and Philosophy
University of Aberdeen
Aberdeen
AB24 3FX
t.heywood@abdn.ac.uk

Abstract

This article re-evaluates the strategic importance of the Russo–Ottoman conflict in Tsarist Russia’s Great War between 1914 and the February Revolution, and by extension in the First World War as a whole. Encompassing the Ottoman closure of the Turkish Straits from 1914 and the associated Gallipoli campaign of 1915–16, it argues that this conflict broadly defined had a crippling impact on the logistics of Tsarist Russia’s entire war effort that was out of all proportion to the perception of it as a sideshow. These problems and their impacts are identified and assessed through an analysis of the principal Russian railway traffic flows that were associated directly with the Russo–Ottoman conflict. Archival data are used to help inform a brief counterfactual discussion of how the removal of these problems through an Allied victory in the Gallipoli campaign or a separate peace with the Ottoman Empire would have created important opportunities to ease the pressure on the Russian railways substantially. In reality the Russo–Ottoman war continued to disrupt the transport system, severely harming the war economy and thus helping to make more likely the implosion of the Tsarist war effort that ultimately occurred in the form of the February Revolution.

Tsarist Russia’s military and political leaders fought the First World War as a life-or-death struggle with the two rival Great Powers on their western border, assigning millions of men to those campaigns against Germany and Austria-Hungary between 1914 and the 1917 February Revolution. By contrast, they treated their concurrent war with the Ottoman Empire as merely a secondary conflict. They limited the size of their army in the Caucasus, Persia and eastern Turkey to only about 300,000 men, supported by the Black Sea fleet – a commitment sufficient to resist the numerically smaller Turkish forces but not to achieve a quick end to the war. Indeed for fear of weakening their western front the Russian army’s high command resisted British and French pressure to send a large expeditionary force to the Bosphorus region in 1915 to assist the Allies’ ill-fated effort to seize the Turkish Straits between the Aegean and Black seas – the so-called Dardanelles or Gallipoli campaign.

Historians have taken much the same dismissive view about the relative importance of this regional war. It is barely mentioned in the classic accounts of Imperial Russia's Great War by Norman Stone and W. Bruce Lincoln, and the same is true of more recent books by such authors as Joshua Sanborn.² David Stone's new history of the wartime army does devote a whole chapter to the fighting in the southern Caucasus, eastern Turkey and northern Persia – the so-called Caucasus or Turkish Front – but really the western borderlands are the author's concern: the sub-title is 'The Eastern Front 1914–1917'.³ Likewise the 1915 volume of O.R. Airapetov's multi-volume history of Russia's involvement in the Great War has just three short chapters about the Caucasus Front and Gallipoli campaign.⁴ Michael Reynolds concludes in *Shattering Empires*, his much praised account of the fraught relationship between the Russian and Ottoman empires during 1908–18, that 'for Russia, the Caucasus front was secondary'.⁵ Significantly, A.V. Oleinikov agrees with this verdict despite stressing the strategic importance of the Straits for the outcome of the World War and his contention that in summer 1916 a Russian attack on the Bosphorus coordinated with the Brusilov offensive could have been used to shorten the war by up to two years.⁶ And there has been no dissent even from Sean McMeekin, notwithstanding his controversial argument that Russia actively sought European war in 1914 with the aim of seizing Constantinople and the Turkish Straits.⁷ Thus it is not surprising that the Russo–Ottoman war remains a marginal topic in general histories of the First World War, even though in recent years Russia has become somewhat more prominent in English-language publications thanks to the growing recognition and understanding of the war as a truly global phenomenon.⁸

Based mainly on contemporary Russian archival and printed sources, this article re-evaluates the strategic importance of the Russo–Ottoman conflict in Tsarist Russia's Great War between 1914 and the February Revolution, and by extension in the First World War as a whole. Encompassing the Ottoman closure of the Turkish Straits in September 1914 and the associated Gallipoli campaign of 1915–16, it argues that this conflict broadly defined had a crippling impact on the logistics of Tsarist Russia's entire war effort that was out of all proportion to the perception of it as a sideshow. These problems and their impacts are identified and assessed through an analysis of the principal Russian railway traffic flows that were associated directly with the Russo–Ottoman conflict. Planning documents and official statistical data are then used to help inform a brief counterfactual discussion of how the removal of these problems through an Allied victory in the Gallipoli campaign or a separate peace with the Ottoman Empire would have created important opportunities to ease the pressure on the Russian railway system substantially.⁹ In the absence of such changes the Russo–Ottoman war continued to exert its disruptive impact on the transport system, severely hampering the operation of the war economy and thus helping to make more likely the implosion of the Tsarist war effort that ultimately occurred in the form of the February Revolution.

This analytical approach and argument are based on two important contentions. The first is that Tsarist Russia's war effort depended critically on the ready availability and smooth operation of long-distance railways. True, the waterways did make a very important contribution to freight shipments, but for the most part they supplemented the railways, which handled the vast bulk of the freight traffic and were simply indispensable for rapid long-distance movements of troops and civilians.¹⁰ The second contention is that the notorious food and fuel supply crises of early 1917 were only marginally the

product of the bad weather in the winter of 1916/17. There is no doubt that that winter was brutal for much of European Russia, especially during February.¹¹ Further, contemporary official reports confirm that total deliveries of ‘first necessity’ items to Petrograd by rail did fall to an average of only 197 wagonloads per day in February 1917 compared with the plan target of 254 wagonloads. Yet the total delivery results were close to or exceeded the ‘planned’ target in each of January and March as well as in the second half of December. (Table 1) Moreover, railway officials identified the main reasons for non-loading of ‘planned’ food for Petrograd as the non-presentation of goods by shippers, so-called food ‘export’ (*vyvoz*) bans by local authorities and the failure by the agriculture ministry’s food plenipotentiaries to provide the essential shipment warrants. For example, in the second half of January ‘planned’ loadings of all food for the North and North West regions were only 2,046 wagons against a target of 10,742 wagons, and the bulk of the shortfall – 5,026 wagons – was due to the non-presentation of goods and local bans whereas only 221 wagons were not loaded due to snow.¹² All sorts of caveats are needed for such statistics, but the crucial point for present purposes is that if the food and fuel supply situation in Petrograd in February 1917 really did depend on every last wagonload, short-term weather problems were not the explanation. Much more significant was the fact that the usual summer stockpiling of food and fuel reserves for the urban populations during the upcoming winter was badly disrupted in 1914 by mobilisation, then again in 1915 by the Great Retreat, and yet again in 1916 by procurement problems combined with a sudden large and as yet unexplained increase in the army’s use of railway freight wagons during August–November, such that across European Russia the urban reserves of key supplies were already very low by spring 1916 and not much greater by the start of Tsarism’s last winter.¹³

Table 1 Arrivals of ‘first necessity’ goods at Petrograd, Jan-March 1917 (wagons, daily average)

Daily average	Total number of wagons delivered to Petrograd	of which ‘planned’	Target for ‘planned’ deliveries
16-31 Dec 1916	291	206	304
1-31 Jan 1917	269	186	250
1-28 Feb 1917	197	136 (revised later to 174)	254
1-31 Mar 1917	330	243	204

Notes: The figures for the complete month 1-31 Mar have been calculated from the half-month figures. Non-planned foodstuffs were usually similar products consigned by private shippers.

Sources: MPS reports to Special Conference on Shipments about freight traffic for 16-31 Dec 1916, 1-15 Jan, 16-31 Jan, 1-28 Feb, 1-15 Mar and 16-31 Mar 1917, at Rossiiski Gosudarstvennyi Istoricheskii Arkhiv (RGIA), f.273 (Upravlenie zheleznikh dorog MPS), op.10, d.3716, ll.16ob, 34, 55, 73, 86.

The following discussion is organised in four sections. The first covers the impact of the closure of the Turkish Straits in September 1914 on the transport logistics of Imperial Russia’s war effort. The second section traces the additional logistical impact of the outbreak of the Russo–Ottoman war in October 1914. The third section assesses the significance of the Gallipoli campaign for the Russian war

effort in terms of, first, the campaign's prospective logistical benefits and, second, the reality of the defeat. The fourth section considers the importance of the continuation of the Russo–Ottoman war into 1917, including the question of how far this war helps us explain the implosion of the Russian war effort in the revolution of February 1917.

The Central Powers' Dual Blockade

The outbreak of the First World War pitched the Russian empire's international trade into crisis. Not only did it deprive the country of her largest trading partner, Germany, but it also posed an enormous and complicated logistical challenge. As was to be expected in any war between Russia and the Central Powers, Russia's western land border was closed for virtually its whole length from the Baltic Sea to the Black Sea, the short border with Romania being the only exception. Furthermore, Germany's dominance of the Danish Straits between the Baltic and North seas terminated the long-distance trade of all the major ports on Russia's Baltic coast such as Riga, Revel' (now Tallinn) and the capital St Petersburg (renamed Petrograd in August 1914). Accordingly the Russians found that, with their Baltic Fleet acting primarily as a coastal defence force, their international commercial shipping in the Baltic region was reduced to just a few vessels operating across the Gulf of Bothnia between Sweden and ports on the west coast of Finland. Apart from the Black Sea ports, the only other significant option in European Russia for trade with Western Europe, and above all with her two main partners in the war, France and Britain, was the northern port of Archangel on the White Sea. The port of Murmansk on the Kola Bay off the Barents Sea was still under construction together with a connecting railway to the capital, and this route would not open until January 1917.¹⁴

Unfortunately for Russia, Archangel was very problematic for handling the immediate and massive demand for urgent war-related imports. In addition to its annual closure by winter ice, it was far from the frontline areas, its facilities were modest and its transport connections to the interior were poor. Its 635-kilometre railway link to the rest of the network at Vologda had merely a low-speed single narrow-gauge track that had been built in the 1890s with only local commercial needs in mind. As of 1913 this railway still had sufficient capacity for the peacetime traffic, but recent growth in demand had prompted the transport ministry, known as the Ministry of Ways of Communications (*Ministerstvo putei soobshchenii* – MPS), to plan to expand this capacity by converting the track to the standard Russian gauge, which would allow faster and longer trains and remove the need for time-consuming and labour intensive trans-shipment operations at Vologda. However, by July 1914 these works had barely started, and the mass of urgent military demands for imports created by the war, starting with diverted British coal for the Baltic Fleet, was far more than this hitherto quiet line could accommodate.¹⁵ True, Archangel was connected to Kotlas via the River Northern Dvina and thence by a branch railway to Viatka on the trunk line between the capital and Siberia via Vologda and Perm. However, the river was closed by winter ice, and the Perm–Viatka–Vologda–Petrograd railway route was soon badly overloaded as one of the mere pair of lines linking Siberia and European Russia.¹⁶

But what transformed this very difficult situation into a far-reaching crisis on 13/26 September 1914 was the Ottoman Empire's decision to close the Turkish Straits to commercial shipping and lay minefields in the seaways.¹⁷ Though legally not an enemy blockade until the formal outbreak of Russo-Ottoman hostilities a month later, this action virtually killed the international trade of Russia's ports on the Black Sea and Sea of Azov which together had handled over half of the empire's European maritime trade by weight in 1913: these ports were now restricted to some domestic, Romanian and Bulgarian coastal traffic at most.¹⁸ In conjunction with the German closure of the Danish Straits to Allied shipping the Ottoman decision created a hostile dual blockade of both the Black and Baltic seas.

The net effects of all these developments were disastrous. Key commodity flows were halted or badly disrupted. As can be seen from Table 2, Russia's exports and hence also export earnings were dramatically curtailed, and the consequent need to rely heavily on loans to fund imports was compounded by the severe logistical difficulties of importing military supplies to supplement the insufficient output of Russia's relatively underdeveloped industrial sector. In other words, the dual blockade became one of the key weapons deployed by the Central Powers against the Allies, targeting the Russian economy in much the same way that U-boat attacks on Allied shipping were used to pressure the British and French war economies.

Table 2 **Russia's Foreign Trade Turnover and Balance, 1913–1917 (by value in million rubles)**

	Exports	Imports	Turnover	Balance
1913	1,520.2	1,374.0	2,894.2	146.2
1914	956.1	1,098.0	2,054.1	-141.9
1915	401.8	1,138.6	1,540.4	-736.8
1916	502.0	2,488.4	2,990.4	-1,986.4
1917	488.3	2,498.8	2,987.1	-2,010.5

Note: the majority of the 1914 trade pre-dates the outbreak of the World War

Source: Narkomfin, Institut ekonomicheskikh issledovanii, *Narodnoe khoziaistvo v 1916 g.*, Vypusk VII (Petrograd, 1922), pp.202–45, cited in C.A. White, *British and American Commercial Relations with Soviet Russia, 1918–1924* (Chapel Hill NC: University of North Carolina Press, 1992), p.25.

In recent decades, of course, there had not been the slightest prospect of Russia controlling the Danish Straits because of Germany's naval strength, whereas the future control of the Turkish Straits had been an international issue for over a century as the European Great Powers manoeuvred to occupy the political vacuum that would appear with the expected imminent demise of the Ottoman Empire. In this so-called Eastern Question the stakes for Tsarist Russia were always high. To control the Straits and Constantinople would mean not only political and cultural prestige but also the military and economic advantages of guaranteed access to the Mediterranean, though realistically not also the Atlantic because of Great Britain's powerful naval presence in the region. On the other hand, Russia would face the danger of blockade if the Straits were closed by Turkey or any other power. In reality, with the 'Sick Man of Europe' stubbornly resilient, the Eastern Question remained live for all of the Great Powers up

to 1914. Indeed the economic and strategic significance of the Straits for Russia even increased after the Crimean War because a surge of railway building across southern Russia facilitated a massive expansion of trade through the southern ports, and the threat became a worrying reality for Russia in 1912 when Turkey closed the Straits for a month in response to Italian attacks.¹⁹ So the establishment in September 1914 of the hostile dual blockade of the Black and Baltic seas was the realisation of one of the Russian government's worst-case nightmares.

Whether or not the Tsarist regime ever envisaged such a dual blockade as very likely, it did little during the two decades before 1914 – the era of the Franco–Russian alliance – to develop large-scale import/export capacity on alternative routes between European Russia and especially France in the event of a European war.²⁰ Actually the options for Russia were very limited given that the most likely enemies were the Central Powers and Great Britain: the former would block the land routes to France through central Europe as well as the Baltic Sea, while the latter's Royal Navy could threaten any routes that required a sea passage. The Anglo–Russian Accord of 1907 did reduce tension with Britain for a time, but relations were starting to deteriorate as early as 1910 and by 1914 the possibility of a Russo–British war was rising.²¹

In 1912 the Tsarist government did authorise one major new infrastructure project in European Russia that would have potentially enormous practical significance for international trade during the World War as the conflict actually unfolded. This was the construction of a railway from the capital to Petrozavodsk, to be extended eventually to Kem' on the White Sea coast and ultimately to the Kola Bay, where a new port would be created. Ironically, when this project was conceived in the 1890s as a line to Kem', no large demand for any international transit freight over this route was anticipated. Indeed, this proposal was ranked only third of three railways proposed for Northern Russia, after lines from Vologda to Archangel and from Perm to Kotlas (for access to Archangel via the River Northern Dvina). Moreover, its rationale was almost entirely commercial, with military issues barely noted in the initial proposal to the Committee of Ministers, thus: 'Finally, the Petersburg–Kem' line will also have some military significance in easing the defence of the White Sea coast'.²² This low priority ranking, together with the relatively high cost, the expense of the Russo–Japanese War, disputes about finalising the route and the logistical difficulties of large-scale construction work in this isolated and geographically inhospitable region, help to explain why the building work did not begin until 1913.²³

Meanwhile, for various practical reasons no real effort was made before the war to develop potential routes for imports and exports through Scandinavia and the southern Balkans. Apart from the crucial fact that consignments to or from France would need to use the North Sea and Mediterranean respectively, and hence would depend on British neutrality or support, the development of land-based connections was problematic. The use of Scandinavia was constrained partly by severe weight restrictions on Finnish railway bridges and rails that would be very expensive to remedy, partly by the low capacity of the freight transfer yard between the Finnish Railways and the Nicholas Railway at Kushelevka in St Petersburg, and especially by a 30 km gap in the track between Torneo (now Tornio) in northern Finland and the Swedish town Karungi.²⁴ Prior to the war, there was no urgent commercial case for connecting the two railway networks, and it is conceivable that Russian concern about Sweden as a potential enemy also militated against expenditure to bridge the gap. In any case, there was

presumably also the consideration that any substantial flow of trade through Sweden could prompt German military intervention. As for the Balkans, there was a rail connection across the river Prut between Ungeni (now Ungheni) and the Romanian town of Iași, but large-scale transit freight through this region could not be contemplated during the years of the Balkan wars and in any case there was no easy railway route between Iași and the Mediterranean or Aegean seas.²⁵

Once the World War began, the question of trade routes was reassessed and urgent measures were taken. As is well known, an enormous effort was made urgently to complete the Kola project as the Murmansk Railway. But even with priority supplies of materials and food and the use of tens of thousands of PoW labourers the full route was not ready for through traffic until January 1917, and even that was on only a limited interim basis pending completion of various bridges and other works.²⁶ In northern Sweden a 26 km line was opened in 1915 from Karungi down the west bank of the River Torne to Haparanda, located across the river from Torneo, and a Russo–Swedish agreement was signed in mid-1915 concerning the design and construction of a bridge over the river for connecting the two networks. But to complete the bridge would take several years, and the Kushelevka yard remained a bottleneck throughout the war.²⁷ In the south little if anything could be done. It was unclear whether Romania would align with the Central Powers or the Entente, and Russian worries about possible war with Romania were not finally dispelled until mid-1916 when Romania sided with the Allies.²⁸

As for Archangel, building work to create additional capacity was started as early as August 1914. New loops and storage sidings were created on the Archangel–Vologda railway, almost doubling its capacity within two months from about five to nine trains per day, and the storage facilities at both Archangel and Kotlas were expanded. Moreover, in October 1914 the government authorised an order in the United States for 30 new freight locomotives for delivery to the Archangel line before the end of the winter, together with the conversion of the whole route to the standard Russian track gauge. More improvements were made to the narrow-gauge track in the meantime. Additionally some enhancement works were undertaken on the Vologda–Cherepovets–Petrograd route, which was largely single-track and now part of the main conduit for the Baltic Fleet’s British coal supply.²⁹

The closure of the Turkish Straits left only one other major Russian port fully operational for international trade – Vladivostok – which could scarcely have been further from the fighting in the western borderlands. Nonetheless, the dispatch of large volumes of urgent goods from North America across the Pacific to Vladivostok was simply unavoidable given the Baltic and Black sea blockades and the capacity limits of Archangel port, the associated railways and the Northern Dvina. With the dual blockade continuing into 1915, the flow of American, Japanese and other goods through the Russian Far East began to rise. For example, the winter arrivals included the 30 engines ordered for the Archangel railway, which were shipped disassembled from the Baldwin Locomotive Works in Philadelphia via the Panama Canal and the trans-Siberian route for reassembly in Vologda and, it was hoped, commissioning before the spring thaw at Archangel.³⁰

Needless to say, this reliance on Vladivostok for urgent imports was fraught with problems. That the huge distance from American and Canadian factories to European Russia implied much longer delivery times than would have been the case with Atlantic routes was obvious, but this problem was

complicated from September 1915 by a massive landslide that blocked the Panama Canal for seven months. North American goods now had to be shipped to Vladivostok either by rail to a west coast port and thence by ship across the Pacific, or via the Indian Ocean: the former option took roughly the same time as the Panama route but was 2–3 times more expensive, whereas the Indian Ocean required much more time. As at Archangel, it became necessary to expand the goods unloading and storage facilities at Vladivostok.³¹ Above all, long delays with the onward shipment of these imports by rail were unavoidable. The distance from Vladivostok to the western borderlands was nearly 10,000 km, and so considerable time was required both for the journey itself and for the provision of empty freight wagons to Vladivostok for loading, at a time of massively increased demand for them throughout the network. Furthermore, the trans-Siberian railway route had very limited freight transit capacity in the Urals, eastern Siberia and the Far East. The most critical bottleneck was in the Urals, where the total combined westbound freight capacity of the two lines through Perm and Ufa was a mere 750 wagons per day for all needs during 1915. Yet in March 1915, before the flow of military imports really began to grow, the army alone wanted 120 wagons per day for its imports and 560 for other needs, while the minimum demand for all other purposes was 200 wagons (including so-called ‘private’ shipments for military needs such as coal for defence-related factories in the Urals).³² Cuts had to be made, and so for much of 1915 the resultant bottom line, so to speak, for westbound freight through Perm and Ufa was a daily limit of about 160 wagons of imports from Vladivostok and scarcely any wagons allocated for civilian needs.³³ In other words, the flow of imports helped considerably to prevent any regular large-scale grain and meat shipments from western Siberia to the urban civilian populations of European Russia.

Table 3 Approximate Delivery Times from New York to Archangel and Vladivostok, circa 1916

New York to	single journey	return journey
Archangel	25–30 days	60–90 days
Vladivostok via American west coast port	30 + (22–24) = 52–54 days	
Vladivostok via Panama Canal	55	120–130 days*
Vladivostok via Indian Ocean	95*	200

Note: The quickest ships on the Archangel route took 12–14 days. The figures marked with an asterisk are estimates.

Source: Otchet o deiatel’nosti Russkogo zagotovitel’nogo komiteta v Amerike i ego likvidatsionnoi komissii’, chast’ II, tom 1, Otdel po perevozkam, pp.89–90, 102, 105: US National Archives, Record Group 261 (Former Russian Agencies), Entry 26, Box L37.

Nor was that all: very important too were the consequences of the dual blockade for imports and exports of high-priority non-military goods. A telling example of these imports is a staple product for the armed forces as well as the civilian market, tea, which was rendered even more important for the war effort by Prohibition. In 1913 most imports of tea had arrived through the Far East, but over twenty per cent of the total by weight had come through the Black Sea ports of Odessa, Novorossiisk and Batum.³⁴ The dual blockade meant that all tea imports had to travel through the Far East and compete with the mass of military and other traffic for access to the trans-Siberian railway route. So much tea

accumulated in the Far East that traders resorted to using parcel post, with railway assistance: in mid-1916 one van-load of some 2,000 parcels of tea was leaving Harbin for Russia each day.³⁵

As for exports, the best example is grain. By late 1914 the French government was struggling to find enough grain on the world market, and so asked the Russian government for help. The Council of Ministers approved this request, not least to obtain the export earnings, but the practicalities of these shipments were nightmarish if the southern ports could not be used. Both Archangel and Vladivostok were considered, but ultimately only Archangel was used, the main option being to send west Siberian grain by rail to Kotlas and barge up the Northern Dvina. However, apart from being impossible in winter, this combination required some of the scarce capacity of the trans-Siberian route through Perm as well as a fairly large number of wagons owing to the long distance and large amount of grain: normally 40 wagons were needed for loading per day during 1915. Given the constraints outlined above on transit freight traffic through the Urals, it is evident that these export shipments further reduced the volume of military and especially civilian goods that could be sent from Siberia for use in European Russia.³⁶

It can be seen, then, that the blockades of the Black and Baltic seas functioned alongside the U-boat campaign in the Atlantic as an integral part of the Central Powers' war strategy, just as the British and French efforts to blockade and isolate the Central Powers were fundamental to the Allied war strategy. Moreover, the actual impact of the combined German–Ottoman blockades on the Tsarist war effort was severe. Together they forced the severe curtailment of Russia's flows of exports and imports during the second half of 1914, undermined the national finances, imposed long and slow diversions for large amounts of urgent goods over routes that had relatively low capacity, and hampered the supply of food and fuel to the cities of European Russia. For Russia, though, these consequences were not the full story: the logistical situation was rendered even worse by the outbreak of war with the Ottoman Empire in October 1914.

The Outbreak of the Russo–Ottoman War

When, as Reynolds remarks, the Ottoman Empire became 'a power hostile to Russia in all but the formal sense' by closing the Turkish Straits in September 1914, the Russian authorities were unsure whether to declare war in response.³⁷ Among those advising caution was one of Russia's leading experts on the region, Mikhail Girs, the ambassador in Constantinople. Although he defined the Straits question as 'undoubtedly the most vital' and was ready in principle to use force to seize them, he argued that for the moment Russia should concentrate on defeating Germany before waging war with Turkey.³⁸ In other words, he stressed the importance of avoiding war as long as there was a chance, however small, of getting the Straits reopened through negotiation. And since presumably the economic and logistical implications of the dual blockade were already becoming clear to the Russian decision-makers, we can suggest that the members of the Russian government who argued for war were extremely confident that either the European war would end soon or Russia could defeat the Ottoman armies very quickly.

Yet the logistical challenges of a campaign against the Ottoman Empire suggest that a quick Russian victory was highly unlikely. A Russian amphibious assault on the Black Sea coast somewhere

north of the Bosphorus would require men and equipment on a scale that neither the army nor the navy could spare. As for a land war in the southern Caucasus, the transport logistics were transformed in Russia's favour from November 1900 by the opening of a trunk railway from Rostov-on-Don through the Caucasus to a junction at Baladzhar'y with the Transcaucasus Railway, which had connected the oil city of Baku on the Caspian Sea with the Black Sea port cities of Batum and Poti since 1882. The reason was simply that Turkey had no railway provision whatsoever from near Ankara to the border with Russia. Several railways were planned for eastern Turkey, but the crucial gap remained in 1914, and because additionally Russia had several branch railways towards the Turkish border, including a line from Tiflis (now Tbilisi) to Kars opened in 1899 and extended to the border town of Sarykamysh in 1913, the Russian General Staff were correct to believe that they enjoyed logistical superiority in that region for the time being despite the fact that most of their routes had just a single track.³⁹ But of course that superiority held only for a defensive campaign because any advance into Ottoman territory would take the Russian army further and further from its railheads. It is likely that for this reason in the autumn of 1914 the Russian plan for this border in the event of war was merely to mount an active defence with some limited local attacks.⁴⁰

That scenario was basically what transpired after Tsar Nicholas II declared war in response to the surprise bombardment of Odessa, Sevastopol', Novorossiisk and other coastal towns by Turkish warships on 16/29 October 1914. A setback soon occurred when, in December 1914, the Ottoman army launched an initially very successful offensive to capture Sarykamysh. But the Russians recovered to defeat their enemy so thoroughly as to deprive them of strategic offensive capability on this front.⁴¹ However, given that Ottoman army did remain in the field, and the Russian army made only limited attacks, there was to be no quick end to the war. Accordingly, the enemy's dual blockade was set to continue for the foreseeable future, and the Tsarist regime had now the additional challenge of waging a two-front war in the far west and far south of European Russia.

The logistical consequences of that new situation were extremely serious for the empire's war effort. Most obviously, the horrendous economic and transport implications of the dual blockade that have been outlined above were set to continue indefinitely. Put differently, now the Tsarist government somehow had to end its war with the Ottoman Empire in order to get the Turkish Straits reopened. In the meantime, the very existence of the Caucasus Front in addition to the fronts of the western borderlands had a wide variety of technical, administrative and other consequences for the railways that included the need to construct additional ambulance trains and the transfer to army control of the Transcaucasus Railways and other railways of the region. So far as the impact on railway traffic was concerned, a number of far-reaching problems can be identified.

In the Caucasus region itself, and given the Russian navy's initial prohibition of even coastal shipping on the Black Sea, the railway route from Rostov-on-Don to Baku, Tiflis and Batum now became the main land lifeline of the Caucasus Army.⁴² Weapons, munitions, food, reinforcements and empty ambulance trains travelled south whereas the northbound traffic flow was dominated by block trains of empty vans, loaded ambulance trains and trainloads of prisoners of war. All this new traffic severely restricted the amount of line capacity that could be used for civilian goods, especially southbound equipment and supplies for the oil industry and northbound food and oil products.⁴³ The resultant

congestion, together with a shortage of tanker wagons, explains why ultimately most oil traffic was sent across the Caspian Sea to Astrakhan and thence by barge up the river Volga for trans-shipment to rail at places with oil storage facilities such as Nizhnii Novgorod and Rybinsk. This rail–water–rail combination was much used before the war to minimise costs, but it was much slower than direct rail shipments, and moreover it was seasonal due to the freezing of the Volga. Nonetheless it became absolutely essential.⁴⁴

In these circumstances the risk of serious disruption to the operation of the Caucasus railways was a real concern. The most likely scenario was a bad accident, but the possibility of sabotage to one of the many bridges and tunnels was also an obvious danger in a region with a large Muslim population to whom the Sultan was addressing a call for jihad. In the event, the first severe test came from natural causes, and occurred on 24 January 1915 with a near-repeat on 15 February. A period of exceptionally warm weather caused a sudden thaw and an ice flow on the river Don that produced chaos at Rostov-on-Don, the ice not only crushing a number of hibernating steamers and barges but also damaging the bridge that carried the railway over the river. Because this bridge had to be closed for several days for repairs, urgent southbound freights had to wait for the bridge to reopen or take a long diversion via Tsaritsyn to Tikhoretsk, while passengers were ferried across the Don at Rostov.⁴⁵

Railways outside the Caucasus region also suffered major repercussions from the Russo–Ottoman war, in addition to the problems already caused by the dual blockade. To give just one example, the railway of the southern Ukraine were affected in several ways. The need to keep the Black Sea Fleet on a war footing implied additional traffic – especially coal – to the naval bases at Sevastopol’ and Odessa, which had to pass through junctions such as Aleksandrovska and Znamenka that were already very busy with traffic to and from the South West Front. Similarly, the navy’s ban on Black Sea coastal shipping meant that goods hitherto moved by sea had to be sent by rail. Not only would the shippers’ costs be higher, but so too would be the civilian demand for freight wagons, which already far outstripped supply, and such traffic would intensify the pressure on the west–east railways through junctions such as Znamenka that were key supply and evacuation routes of the South West Front in addition to their roles as conduits for the Black Sea Fleet and generally for Donbass coal and ores. Indeed, the traffic situation in this region became so difficult by spring 1915, especially at Znamenka, that the army’s Chief Quartermaster pressed the transport minister, S.V. Rukhlov, to send food from the Nikolaev area to Odessa by sea instead of by rail, and an inter-ministry committee was created at the Odessa Military District to explore this idea.⁴⁶ In these circumstances it is not surprising that railway officials were intrigued by the British and French campaign to open the Turkish Straits from February 1915. The next section will show the prospective logistical dividend from peace with the Ottoman Empire, including the reopening of the Straits.

The Significance of the Gallipoli (Dardanelles) Campaign for Russia’s Transport Logistics

From its outset on 6/19 February 1915 the Allied attack on the Dardanelles was seen both within Russia and elsewhere as potentially a crucial new chapter in the war. For example, noting the battleships to the fore, Russian newspapers from various political camps stressed the campaign’s strategic and political

significance. At last, it seemed, Britain and France were making a real effort to help their eastern ally.⁴⁷ The Russian Ministry of Finances bought 14.5 million puds (237,510 tonnes) of grain owned by private banks and stored at southern ports, planning to export this grain to France as soon as the Straits were reopened.⁴⁸ The transport ministry, meanwhile, hoped that the Dardanelles operation would permit its orders for 10,000 modern North American freight wagons to be imported through the Black Sea rather than Vladivostok.⁴⁹ And the deputy of the British Ambassador in Petrograd, Hugh O'Beirne, predicted that the resumption of trade through the Straits would considerably boost the state's income from customs dues.⁵⁰ On the side of the Central Powers there was concern that this campaign could be decisive for the whole war. For example, the German General Staff's head of railway transport, Wilhelm Groener, confided to his diary on 9 March 1915: 'It seems to me not impossible that the Dardanelles question could give the whole war a different direction'. He worried that if the Allies opened the supply route to Russia via the Straits and the Black Sea, neutral Romania would side with the Entente and Russia would be able to defeat Austria-Hungary, leaving Germany isolated and surrounded.⁵¹

That sense of the plan's potential strategic importance has remained unchallenged over the ensuing century, with the critics of the ill-fated campaign tending to make their case by concentrating on the tactics employed. Significantly, this perspective shaped the thinking of the Royal Commission that was established by the British government in 1916 to investigate the disaster. Published in December 1917, its report addressed only a few words to the strategic vision: success culminating in the occupation of Constantinople 'would, it cannot be doubted, have exercised a profound effect on the future course of the war. The advantages capable of being secured by success in this enterprise were, indeed, so obvious that it is unnecessary to dwell on them at any length.' In summary, success would deter Bulgaria from joining the Central Powers; Russia could import much needed supplies and export agricultural produce; and it would help to settle the centuries-old question of the control of the Straits.⁵² Unsurprisingly, those elusive benefits were also cited by defenders of the campaign to try to justify the bloody sacrifice that had been made. In addition to the grand ambitions acknowledged by the Royal Commission they noted the advantage of strengthening the defence of Egypt and the Suez Canal. Most famously, the 1915 volume of Winston Churchill's *The World Crisis*, first published in 1923, emphasised the strategic rationale of reopening the supply route to Russia, noting the necessity of establishing 'intimate and continuous contact' between Russia and her Western Allies. That said, he like others did not go into detail about precisely which benefits were expected, perhaps for the same reasons of military secrecy that pertained during the war itself, and a thorough discussion of those benefits is long overdue.⁵³

Research in British and French archives is still needed to clarify whether the decision to proceed with the Dardanelles operation was informed by any detailed information or calculations about the trade and logistical benefits for Russia's war effort. But using Russian sources and the above picture of the Russian logistical difficulties caused by the Russo-Ottoman conflict it is certainly feasible to identify a number of likely substantial gains in relation to the logistics of Russia's war effort. The most obvious gain, as Churchill intimated, would have been the much quicker delivery of foreign-made military goods to the frontline area. Most of these goods ordered by the Tsarist government in North America during the war were produced in the north east quadrant of the United States, with much also coming from the

south-eastern area of Canada.⁵⁴ With Archangel already operating at capacity, it would have been far quicker to ship those goods from American east-coast ports such as Philadelphia, New Jersey and New York to Black Sea ports than to Vladivostok thanks to the much shorter distance (see Table 3). And once the goods had arrived in Russia, the relatively short distance to the front lines from ports such as Odessa, Sevastopol' and Rostov could have been covered in a few days rather than the many weeks needed for even urgent shipments from Vladivostok. As can be seen from Table 4, which compares notional journeys of freight in 1916 from Vladivostok and Rostov to Kiev as one of the main supply junctions for the South West front, roughly 13 days were needed for the shipment from Rostov to Kiev whereas the journey from Vladivostok to Kiev would take about ten times longer.

Table 4 Wagon Usage Estimates for Freight Deliveries to Kiev from Vladivostok and Rostov, 1916

Journey	Approx. distance (km)	Average daily wagon mileage (km, Jan–Oct 1916)	Approx. days needed for the outward loaded journey	Approx. days needed for one loaded journey and empty return	Number of return journeys per 260 days
Vladivostok to Kiev	9,710	76.5	127	254	1
Rostov to Kiev	940	76.5	13	26	10

Note: the return from Kiev is taken as empty because a/ loading for the return would require more time, and b/ the volume of eastbound goods moved from European Russia to Vladivostok was not high. In practice the number of days for a return journey by the given wagon could have been somewhat higher for a variety of reasons, including its employment under load for part or all of the return journey.

Source of wagon mileage statistic: calculated from Spravka o srednem sutochnom probege rabocheho tovarnogo vagona v 1915 g. i 1916 g.: RGIA, f.273, op.10, d,3733, l.132.

This rerouting of imports would have involved higher insurance costs due to the increased risk of loss at sea from submarine attack, and indeed the actual loss of at least some consignments would have been expected. But any such additional costs would have been far outweighed by not just the quicker delivery but also the opportunities to secure a variety of related substantial benefits. Thanks to the shorter sea passage more goods could have been moved by the same number of ships: if the time needed for the Black Sea route is regarded as similar to Archangel at roughly 75 days for a return run from New York, the figures in Table 3 imply the potential to move nearly twice the amount of goods as the Panama canal route and three times the amount of the Indian Ocean route – a critical consideration given the Allies' shortage of tonnage from 1915 onwards. By the same logic Russia's railways would have been able to redeploy a vast number of wagons. As can be seen from Table 4, the Vladivostok route required roughly ten times more wagons than would have been the case for imports routed through Rostov. Additionally, diverting goods away from Vladivostok also had the potential to relieve some of the pressure on the trans-Siberian railway route. Given, as noted above, that only 750 freight wagons

per day could be moved from Siberia into European Russia, of which 160 were allocated for goods imported through Vladivostok as of October 1915, we can see that potentially about 20 per cent of the available capacity could have been reassigned for other westbound freights from the Urals and western Siberia.⁵⁵ That such a change could have had broad economic and political importance is clear if we note that the dispatch of even just 40 additional wagons per day of west Siberian food could have made a clear difference to the urban food supply situation in European Russia. That quantity was one trainload of about 40,000 puds (655 tonnes), which would equate to about 118,000 tonnes of food in a six-month period.

The opening of the Turkish Straits would also have made feasible certain other substantial changes to international freight flows that together had the potential to relieve a lot of the strain on Russia's railways and war economy. There would have been a strong argument for diverting all military hardware imports from Archangel to the Black Sea ports and employing the northern route just for imports of British coal and assistance to the Murmansk Railway project. More coal could thus have been moved (subject to the availability of suitable ships), and certainly it could have been moved inland faster thanks to the reduction of other demands on the Archangel Railway. In turn it could have been possible to assign some of this additional coal for civilian purposes – for use by factories, power stations, the water supply and tramway systems, hospitals and other such important public consumers in Petrograd. The Petrograd city authorities had received assurances from minister Rukhlov during the winter of 1914/15 that they could have up to 12 million puds (196,560 tonnes) of the coal arriving through Archangel – about 1,000–1,100 wagonloads per month. In reality, however, they received far less because of the higher priority demand from the Baltic Fleet and the difficulties of moving the coal from Archangel, so that by early January 1916 the city's coal reserves were virtually exhausted. To judge by the calculations of the city administrators, given also the wartime campaign to increase the use of firewood, we can suggest that the level of supply through Archangel that Rukhlov had promised would have been sufficient to eliminate the need for any Donbass coal to be sent to the city authorities.⁵⁶ And obviously if that scenario had become possible, large amounts of Donbass fuel, line capacity and rolling stock could have been reassigned to other uses, including increased fuel shipments to other cities.

Three other examples from the civilian sector, including two for which there is archival evidence of planning, can emphasise the considerable scope for the resumption of Black Sea trade to reduce the strain on the Russian war economy. Tea could have been imported from Ceylon not just through Odessa and Novorossiisk for European Russia but also through Batum for forwarding via Baku and Krasnovodsk to the hugely important Central Asian market which for this product was centred on Samarkand. The advantages would lie in the quicker delivery, larger quantities and, yet again, in reducing the traffic demand from Vladivostok. Similarly, in June 1915 an MPS report to the Council of Ministers proposed that preparatory work be started at once for ordering 165 million puds (2.7 million tonnes) of coal in Britain and the United States and chartering the necessary ships to allow delivery through the Black Sea as soon as the Straits were opened.⁵⁷ Finally, the grain exports to France and later also Britain could have been sent through southern ports such as Rostov instead of Archangel, and local south-eastern grain could have been used, occupying the requisite freight wagons for days rather than weeks. This idea was the preferred option when the first French request arrived in 1914 and explains why the

Ministry of Finances bought so much of the grain stored at southern ports in early 1915.⁵⁸ Such a change would have released more of the critically limited track capacity between Perm and Viatka as well as more wagon capacity, and while again doubtless there would have been strong army pressure for this track capacity to be reassigned for military use, there would have been a greater chance to persuade the armed forces to allow some movement of west Siberian food into European Russia for civilian purposes. Furthermore, as O'Beirne had noted, by establishing these exports to the Allies on a much firmer footing the Russian government would have been more assured of getting the associated hard currency income that it needed so desperately.

Given that the opening of the Straits would have required the end of the Russo–Ottoman war, we must also consider the benefits that this peace would have provided for the railways of the Caucasus and beyond. Above all, the immense strain imposed by that war on the Rostov–Baladzhar–Baku railway route would have been eliminated. Shipments of food and other supplies would still have been needed for the defence force stationed in the south, as was normal in peacetime, but there would have been no need for the constant large-scale movements of fresh troops, PoWs and ambulance trains that, together with the heightened wartime supply requirements of the army, occupied most of the Caucasus region's railway capacity. In turn it would have become feasible to resume oil shipments to the full extent of the railway network's tanker wagon stock. Also possible would have been the resumption of northbound shipments of Central Asian cotton through the Caucasus: that change would have removed some of the pressure on the Tashkent–Orenburg–Kinel' route and especially the extremely busy section of the trans-Siberian route between Kinel' and Syzran', and might also have allowed the release of some of the Volga shipping being used for cotton. Equally, provided that shippers did present grain for shipping and the local authorities permitted such shipments – both vexed problems across European Russia during 1916 – it would have been possible to resume large-scale grain shipments from the Caucasus. Important potential destinations for this grain included not just the French and British markets, but also the industrial cities of the Donbass, for which priority deliveries of food were part of the Tsarist regime's effort to tackle the damaging shortage of labour in the coal and iron ore mines, and also Central Asia.⁵⁹ A fourth possibility might have been northbound shipments of meat products and fruit, although to judge by contemporary railway literature, the meat and fruit producers in the Caucasus wanted to send their wares to Moscow and Petrograd for the best prices instead of serving closer markets such as Rostov and the Donbass – a preference that was at odds with maximising the utilisation of the railway network's limited stock of ice-cooled vans.⁶⁰ Also, it is likely that the coal supply to the Baltic Fleet could have been reduced somewhat.

Although it is impossible to determine how far the opportunities identified above would have been exploited in the event of peace with the Ottoman Empire in 1915 or 1916, it seems reasonable to presume that at least some of these steps would have been taken, especially given the archival evidence cited above of planning by civilian ministries during 1915 for precisely this scenario. Essentially this issue was a matter of how far the Russian armed forces, primarily the army, would have been willing to cede their absolute priority for allocations of wagons in the interests of supporting the war economy as a whole. In reality the military members of the key Petrograd committee responsible for determining the empire's freight traffic priorities continued to put their own needs firmly ahead of the urgent needs of

industry and the civilian population until early 1917, even to the detriment of civilian factories working on crucial military contracts.⁶¹ Nonetheless, given the key actual freight flows and bottlenecks, it is reasonable to assume, firstly, that had the Straits been reopened most of Russia's military imports would have been redirected to the Black Sea ports, for that was simply the most logical thing to do for the many reasons noted above; indeed when the managements of the main railways serving these ports were planning their rolling stock needs for 1917 they submitted two calculations – one extrapolated from the current circumstances of spring 1916 and the other with the Black Sea ports fully operational after the opening of the Straits.⁶² It would also have been very logical, secondly, for Archangel to specialise on coal imports for the Baltic Fleet and north-west region, and thirdly, for much more oil to be moved by rail instead of barge. If even just these three changes had been effected, the direct benefits for the armed forces and the railways would have been very considerable indeed, as indicated above, not to mention any indirect benefits that would have become attainable in principle. But would the resultant improvement have been enough to persuade the armed forces to agree at that juncture to the regular movement of, say, 40 wagons per day of west Siberian food to the urban populations of European Russia? An affirmative answer is certainly conceivable given that the imported military supplies could have been delivered to Russia's western fronts so much more quickly in this scenario and given also the cessation of grain export traffic through Perm and the military advantages of improving the food supply flows to the major industrial areas.

Finally, it should be stressed that a major reorganisation of the management of the railways would not have been essential in order for such traffic changes to be put into practice. There was a long-established planning system for making network-wide decisions about changes to freight flows, supported by a series of regional traffic planning committees to decide how to implement those policies in the context of local conditions. This planning system was certainly not perfect, and for various reasons it attracted considerable official and public criticism during the war, prompting several attempts to reform the central committee structures.⁶³ However, much of that criticism seems to have stemmed from a lack of accurate information about the nature of the traffic situation due to military secrecy, and although the wartime shortage of freight wagons badly hampered their work, the regional committees appear to have functioned reasonably effectively. The changes to freight flows outlined above could even have made their work less difficult by easing the shortage of wagons. As for the criticisms made in particular by the leading Kadet politician N.V. Nekrasov that the management of the railway system was too centralised and undemocratic, there was certainly some scope for decentralisation, but radical reform in wartime was not necessarily wise. As the Provisional Government's first Minister of Ways of Communication in 1917 Nekrasov did try to implement some decentralisation and democratisation of railway management, even giving some decision-making roles to the new railway trade union. But his Order of the Day no.6321 of 27 May 1917 caused uproar among railway managers across the network, and even prompted the resignation of the Head of the Directorate of Railways.⁶⁴ On balance, it is hard to see how any substantial reform of the freight traffic planning bureaucracy during wartime could have been effected without causing chaos in the short term at least.

Towards the February Revolution

The Australian journalist and military historian Alan Moorehead asserted in his influential history of the Gallipoli campaign that Russia might not have signed a separate peace with the Central Powers in 1918 and the Russian revolution might not have happened, 'not at all events so soon, or possibly so drastically', if the Gallipoli campaign had been successful in 1915 or 1916.⁶⁵ Was this claim journalistic hyperbole, or did he have a point? A categorical answer to this question is obviously impossible, but the above analysis of Russia's wartime logistical problems suggests that he did have a point as far as the February Revolution was concerned. The Allied defeat at the Dardanelles meant that the Tsarist regime could not change its main freight flows in any of the ways outlined above, and so the Russian war effort continued to be hampered by, among other things, the myriad of transport bottlenecks, with the food and fuel crises becoming ever more serious. Of course, the outbreak of the February revolution cannot be attributed solely to the supply crises in Petrograd, and indeed as Gatrell reminds us, civilian food riots occurred in other belligerent countries during the First World War without bringing revolution.⁶⁶ But there can be no doubt that the transport bottlenecks and supply crises across Russia were major factors in the deterioration of the political situation during the last quarter of 1916 and the start of 1917, and as has been shown, the Russo–Ottoman war made those transport problems much more severe than need otherwise have been the case.

That said, Allied victory at Gallipoli in 1915 or even 1916 may not have been essential for Russia to gain access to the opportunities that have been sketched above. In the autumn of 1915 the Russian Chief of Staff General M.V. Alekseev advised the government to negotiate a peace treaty with the Ottoman Empire, and he repeated this advice following Russia's capture of the fortress city of Erzurum and the port of Trabzon in early 1916. He worried, it would seem, that Russia could not continue to fight a two-front war successfully, and he wanted to be able to transfer some of the Caucasus Army to Russia's western front.⁶⁷ By spring 1916 he could also argue that their enemy might well be willing to negotiate because of the Russian army's major victories in eastern Turkey. And it is safe to assume that in the event of a peace agreement that summer to end the Russo–Ottoman war, the Straits would have been reopened quickly, potentially changing the course of not just Russia's war but also the World War as a whole.

That scenario would have required British and French support for any Russian or joint Allied peace proposal together with Turkish acquiescence to both negotiations and peace terms. To secure British and French agreement would have been a difficult challenge given the degree of mutual distrust between the allies, their competing imperial ambitions in the Middle East and their commitment to the Sykes–Picot–Sazonov agreement about partitioning the Ottoman Empire.⁶⁸ But perhaps it would have become possible if the Russians had been more candid with their allies about the precise nature of their transport logistical problems in order to explain the urgency of reopening the Straits. In reality, to judge by the surviving British and French official records, the Tsarist authorities did not keep the British and French military and diplomatic representatives in Russia fully informed about the actual problems such as the railway capacity bottleneck in the Urals. Hence, surprising as it may seem, the French and British appear to have been unaware of even the disruptive impact of their own grain export traffic through Perm to Kotlas.⁶⁹

As for Turkish acquiescence to both talks and terms, one might argue that although the strategic difficulties of their forces were serious as of spring 1916, the lack of railways in eastern Turkey was now a significant defensive advantage for them, for in any advance the Russians would have had to rely on supply by cart over long distances. Furthermore, although Constantinople's economic situation was dire, there was no serious public pressure on the government to seek peace. As for the opposition politicians who did try to start peace talks during 1915 and 1916, the regime gave them no support. On the other hand, the war had always been controversial among the Ottomans, and conditions in the empire were so bad by 1917 that the government needed German soldiers to guard buildings. Had the Entente offered lenient terms, Reynolds suggests, the Ottoman Empire might have accepted.⁷⁰

Yet the Tsarist government rejected Alekseev's plea. Explaining this decision, Reynolds notes the negotiation at that time of the Sykes–Picot–Sazonov agreement, whereas McMeekin stresses Sazonov's desire to control Constantinople. Bobroff also targets Sazonov: he 'refused to follow the more rational choice', and clung 'desperately' to the British and French pledge to let Russia control the Straits and Constantinople after the war 'at the expense of Russia's overall war effort'. Bobroff concludes that by in effect depriving the western front of the troops and resources that were assigned to the Russo–Turkish conflict Sazonov's policy on the Straits and Constantinople 'contributed, in a tangible fashion, to the Russian collapse'.⁷¹ The final say, of course, lay with the Tsar, and his final words about the peace feelers from the Turkish opposition in 1916 indicate that in reality Russia's political and diplomatic leadership dealt very blithely with the ramifications of the dual blockade: 'We must finish with Turkey. In any case there's no place for her in Europe any more. So it is not appropriate for us to starting communicating with the [Turkish] opposition'.⁷²

In the light of the logistical implications of the Gallipoli defeat that have been revealed above, these opportunities appear potentially much more important than has been thought for the Russian war effort. Had the Russo–Ottoman conflict been ended at this juncture by a Russo–Turkish or Entente–Turkish treaty, the scope would have existed for Russia and her allies to secure the same logistical advantages that victory at Gallipoli would have provided. Thus, if Alekseev's initiative is treated as a serious opportunity to secure both peace and the vital logistical benefits, one can propose that Moorehead was wrong to define the Gallipoli defeat as a *decisive* event for the outbreak of the February revolution. Similarly, Sazonov's obsession with the Straits does appear to have hampered the war effort substantially and helped to make revolution more likely, above all because of the far-reaching logistical consequences.⁷³ The same criticism may be levelled at the Tsar himself.

In the event, the dual naval blockade of Russia simply continued from 1914, as did the land war in eastern Turkey, with all their serious ramifications for the Russian war effort. As is well known, the logistical difficulties became even worse during 1916. In particular, shortages of food, labour and freight wagons at both Archangel and Vladivostok hampered the unloading of goods and their dispatch to the interior; congestion on the trans-Siberian route increased; congestion on the railways of the Caucasus became acute; and the summer and autumn shipments of food and coal to the cities for winter stores were far below target. Then European Russia experienced the worst winter weather in living memory, and finally, towards the end of February 1917, the resultant strain became unbearable.⁷⁴ The logistical

and supply crises were by no means the only factors that provoked the February revolution but they clearly played very important roles. The German–Ottoman dual blockade had done its job.

Conclusions

This article has argued that although the Russo–Ottoman conflict was a sideshow within the First World War in terms of the number of men engaged, its significance for Imperial Russia's crucial transport logistics was immense. The closure of the Turkish Straits from September 1914 was a fundamental problem. In conjunction with the wartime German closure of the Danish Straits it formed a hostile dual blockade that had debilitating consequences for Russia's war economy, and those difficulties were compounded by the formal outbreak of the Russo–Ottoman war a few weeks later. Russia was left with just two main ports fully operational, Archangel and Vladivostok, both of which were far from the battle lines. Her foreign trade was pitched into crisis, with exports and export earnings dramatically reduced and imports of military and other vital goods diverted through these two ports. Vastly more freight wagons were needed for these essential shipments than would have been the case for the Black Sea ports, and necessarily this demand worsened the railway network's shortage of wagons considerably. Furthermore, this long-distance import/export traffic contributed both directly and indirectly to the congestion of key railway routes: indeed these shipments helped to prevent the bulk shipment of west Siberian food to the cities of European Russia. The outbreak of the Russo–Ottoman war not only ensured that the dual blockade would continue, but also faced Russia with the difficult challenge of two-front warfare. It generated chronic congestion on the railways of the Caucasus and elsewhere, with consequences that included severe disruption to oil shipments throughout Russia and supply traffic to the South-West Front.

These findings suggest a number of conclusions about Tsarist Russia's participation in the First World War, its war effort and ultimately its demise in February 1917. The dual blockade of the Baltic and Black seas needs to occupy a far more prominent place in our understanding of Russia's Great War as a fundamental part of the Central Powers' strategy to win the wider war against the alliance of Russia, France and Britain. It formed an eastern parallel of the U-boat campaign to blockade Britain and France, echoing the Entente's naval blockade of the Central Powers for exactly the same type of economic-strategic purpose, and with a powerful capacity to disrupt and pressure the Russian war effort that is now clear. To emphasise this parallelism provides an important perspective on the naval war as a whole. For example, it highlights a difficulty with the current attempt to rethink the Battle of Jutland in May 1916 as 'the battle that won the war' for the Allies by forcing the German surface fleet to stay in port.⁷⁵ That verdict neglects the fact that a priority role of the High Seas Fleet was to keep the Danish Straits closed to Allied shipping, and that thanks to the Kiel canal the German fleet could pose the greatest overall threat to the Entente by staying in port, challenging both the North Sea and the Baltic Sea simultaneously. From that perspective a key result of the Battle of Jutland was to maintain the rigour of Germany's Baltic blockade to the continuing detriment of Russia and, with the collapse of the Russian war effort in 1917, the Entente as a whole.

Similarly, there needs to be greater awareness that Russia's First World War was very much a war of two fronts on its western and southern borders, just as the concept of multi-front warfare is fundamental for understanding the involvement of Germany and Austria-Hungary in the war. The serious and far-reaching nature of the transport ramifications indicates that any temptation to think of the war in the southern Caucasus as an isolated, almost self-contained conflict must be resisted. Rather, this was a war that pulled the Russian war effort in differing directions, and while this regional conflict was by no means responsible for all of Russia's wartime logistical difficulties, it did cause certain chronic transport problems that had very serious ramifications across the whole empire, as for example in the case of oil shipments.

Overall, the logistical consequences were so disruptive and so far-reaching over the course of more than two years that they contributed considerably to the deepening of the supply crises across European Russia. Indeed, this article identifies a scenario in which, other things being equal, the technical, geographical and other difficulties of Imperial Russia's transport logistics appear far more manageable if the Russo-Ottoman war is removed from the scene and the Black Sea ports are treated as fully open. Expressed differently, the routine charge of managerial incompetence at Russia's transport ministry misses the reality that some of the most important wartime difficulties were intractable in the circumstances of the dual blockade and two-front warfare. This assessment is not to deny that poor management and incompetence were serious problems on the railways or to say that all other things did remain equal. But it does imply that the disruption to transport logistics caused specifically by the Russo-Ottoman war broadly defined was so great that the Ottoman Empire's removal from the war in 1915 or 1916 would have had the potential to change the course of the war for Tsarist Russia despite all the other organisational problems on the railways. The strategic thinking that underpinned the Allied operation to open the Turkish Straits in 1915 can thus be seen as sound, whereas the actual Russian policy in 1916 simply to 'finish with Turkey' was disastrously misguided.

This situation implies the need for further research about three related issues concerning the management of the Russian war effort. The first is the question of how far these specific difficulties were perceived and understood at the War Ministry in Petrograd and especially at the Commander-in-Chief's Field Headquarters in Baranovichi and later Mogilev. Was there any discussion of the logistical costs of the Russo-Ottoman war among, for example, the officers in charge of the army's transport logistics, or did they simply accept the situation as unavoidable? Secondly, when General Alekseev voiced his recommendation for a separate peace with the Ottoman Empire in autumn 1915 and early 1916, merits further research, how far, if at all, was his thinking influenced by the logistical issues at stake, and did he envisage any wider strategic aim beyond transferring some of the Caucasus army's units to strengthen Russia's western front? Or was he simply trying to find more men for the fronts of the western borderlands as the shortage of new recruits became worse and worse? Thirdly, why was Alekseev's proposal rejected by the Tsar and his government? In particular, how far did those policy-makers in Petrograd understand and appreciate the logistical issues at stake? Whatever the answers to these questions, Alekseev created an opportunity, however slight, for changing the course of the Great War in 1916, and hence one can conclude that Moorehead went too far in asserting that the Allies' defeat at Gallipoli effectively condemned Russia to revolution.

Finally, we need to rethink the relationship between the Russo–Ottoman conflict and the Tsarist regime’s demise in the February Revolution. The logistical consequences of the Russo–Ottoman conflict provide an alternative approach to the traditional liberal narrative that ascribes so much of the blame for the supply crisis and the start of the revolution to the incompetent management of the rear by the tsarist regime with a heavy hint of treachery. Imagine for a moment that in June 1916 Russia was fighting a one-front war on her western borders with all her Black Sea ports in full operation in addition to Archangel and Vladivostok, and that the Baltic blockade and the trench stalemate were continuing, Jutland and the Brusilov offensive having failed to achieve the elusive strategic breakthrough. Military imports would have been flowing to the front lines in much greater quantities than was the case in reality, while the rear infrastructure would have had much more capacity to move fuel and food to the armed forces and the urban civilian population. With the fuel shortages being eased by large-scale imports of British and possibly also American coal, the rebuilding of winter fuel and food stocks could have been much less difficult, depending especially on how the government dealt with the disruption caused by its policy of fixed procurement prices. In those circumstances, what would it have taken for Russia’s political crisis to continue deteriorating to the point where revolution became inevitable?

Acknowledgements

Many colleagues have helped with the preparation of this article, and I am especially grateful to Robert Frost, Boris Kolonitskii, Jenny Macleod, David McDonald, Bill Rosenberg, John Steinberg and the two anonymous reviewers for their advice and encouragement.

References

Airapetov, O.R., *Uchastie Rossiiskoi imperii v Pervoi mirovoi voine (1914–1917): 1915 god – Apogei* (Moscow: Kuchkovo pole, 2014).

Airapetov, O.R., *Uchastie Rossiiskoi imperii v Pervoi mirovoi voine (1914–1917): 1916 god – Sverkhnapriazhenie* (Moscow: Kuchkovoe pole, 2015).

Anfimov, A.M. and Korelin, A.P. (comps and eds), *Rossiia 1913 god: Statistiko-dokumental’nyi spravochnik* (St Petersburg: Blits, 1995).

Bobroff, R., *Roads to Glory: Late Imperial Russia and the Turkish Straits* (London: I.B. Tauris, 2006).

Churchill, W.S., *The World Crisis, 1911–1918* (London: Penguin Classics, 2007).

Coates, T. (ed.), *The World War I Collection: Gallipoli and the Early Battles, 1914–15* (London, 2001).

Departament zheleznodorozhnykh del Ministerstva finansov, *Svodnaia statistika perevozok po russkim zhel[eznym] dor[ogam], 1915 god: Chai* (Petrograd, 1917).

Dohan, M.R., 'Foreign Trade', in R.W. Davies (ed.), *From Tsarism to the New Economic Policy: Continuity and Change in the Economy of the USSR* (Basingstoke: Macmillan, 1990), pp.212–33.

Gal'perina, B.D. et al (eds), *Osobyie zhurnaly Soveta ministrov Rossiiskoi imperii, 1914 god* (Moscow: Rosspen, 2006).

Gatrell, P., *Russia's First World War: A Social and Economic History* (Harlow: Pearson, 2005).

Golubev, A.A., *Murmanskaia zheleznaia doroga: Istoriia stroitel'stva (1894–1917 gg.): Monografiia* (St Petersburg: PGUPS, 2011).

Hewitt, N., 'Jutland: the battle that won the First World War, *BBC History Magazine*, May 2013, accessible online at <http://www.historyextra.com/article/premium/jutland-battle-won-first-world-war-0> (last accessed 22 March 2017).

Heywood, A.J., 'Friend or Foe? "General Winter" and Tsarist Russia's War Effort, 1914–17', paper presented to the XL annual conference of the Study Group on the Russian Revolution, University of East Anglia, 3–5 Jan 2014, accessible online at <http://aura.abdn.ac.uk/handle/2164/8418>

Heywood, A.J., 'Frost and Snow, War and Revolution: The Impact of Winter Weather on Tsarist Russia's Railways, July 1914–March 1917', paper presented to the conference 'Frost, Ice and Snow: Cold Climate in Russian History', German Historical Institute and Rachel Carson Center for Environment and Society, Moscow, 16–18 Feb 2012, accessible online at <http://aura.abdn.ac.uk/handle/2164/8417>

Heywood, A.J., 'The Limits of Competence: Coping with Armageddon on the Archangel Railway, 1913–March 1917 (working paper), accessible online at <http://aura.abdn.ac.uk/handle/2164/8416>

Heywood, A.J., "'The most catastrophic question": railway development and military strategy in late imperial Russia', in T.G. Otte and K. Neilson (eds), *Railways and International Politics: Paths of Empire, 1848–1945* (London: Routledge, 2006), pp.45–67.

Jelavich, B., *Russia's Balkan Entanglements, 1806–1914* (Cambridge: Cambridge University Press, 1991).

Lincoln, W.B., *Passage through Armageddon: The Russians in War and Revolution, 1914–1918* (Oxford: Oxford University Press, 1994) (first published 1986).

Luntinen, P., *French Information on the Russian War Plans, 1880–1914* (Helsinki, 1984).

Mal'kov, V.L., Shkundin, G.D. et al (eds), *Mirovye voiny XX veka, kniga 1: Pervaia mirovaia voina: Istoricheskii ocherk* (Moscow: Nauka, 2005).

McMeekin, S., *The Russian Origins of the First World War* (Cambridge, Mass.: Harvard University Press, 2011).

Moorehead, A., *Gallipoli* (London, 1956)R. Nakhtigal', *Murmanskaia zheleznaia doroga, 1915–1919 gody: voennaia neobkhodimost' i ekonomicheskie soobrazheniia* (St Petersburg: Nestor-Istoriia, 2011).

Neilson, K., *Britain and the Last Tsar: British Policy and Russia, 1894–1917* (Oxford: Clarendon Press, 1995).

Neilson, K., *Strategy and Supply: The Anglo–Russian Alliance, 1914–17* (London: Allen & Unwin, 1984).

Oleinikov, A.V., *Turetskii front Rossii, 1914–1917* (Moscow: Veche, 2016).

Rielage, D.C., *Russian Supply Efforts in America During the First World War* (Jefferson, NC: McFarland, 2002).

Reynolds, M., *Shattering Empires: The Clash and Collapse of the Ottoman and Russian Empires, 1908–1918* (Cambridge: Cambridge University Press, 2011).

Sanborn, J., *Imperial Apocalypse: The Great War and the Destruction of the Russian Empire* (Oxford: Oxford University Press, 2014)

Senin, A.S., *Ministerstvo Putei Soobshcheniia v 1917 godu*, 2nd edn (Moscow: URSS, 2009).

Senin, A.S., *Zheleznodorozhnyi transport Rossii v epokhu voin i revoliutsii (1914–1922 gg.)*, (Moscow: GOU Uchebno-metodicheskii tsentr po obrazovaniuu na zheleznodorozhnom transporte, 2009).

Sidorov, A.L., 'Zheleznodorozhnyi transport Rossii v pervoi mirovoi voine i obostrenie ekonomicheskogo krizisa v strane', in *Istoricheskie zapiski*, vol.XXVI (Moscow: AN SSSR, 1948), pp.3–64.

Siegel, J., *Endgame: Britain, Russia and the Final Struggle for Central Asia* (London: I.B. Tauris, 2002).

Stone, D., *The Russian Army in the Great War: The Eastern Front, 1914–1917* (Lawrence, KS: University Press of Kansas, 2015).

Stone, N., *The Eastern Front, 1914–1917* (London: Hodder and Stoughton, 1975).

Stevenson, D., *1914–1918: The History of the First World War* (London: Penguin, 2005).

Strachan, H., *The First World War: A New Illustrated History* (London: Simon and Schuster, 2003).

Torrey, G.E., *The Romanian Battlefield in World War I* (Lawrence, KS: University Press of Kansas, 2011).

Vasil'ev, N., *Transport Rossii v voine 1914–1918 gg* (Moscow: Voenizdat, 1939).

Zaionchkovskii, A.M., *Podgotovka Rossii k imperialisticheskoi voine: Ocherki voennoi podgotovki i pervonachal'nykh planov, po arkhivnym dannym* (Moscow, 1926).

Birzhevye vedomosti

Izvestiia Osobogo soveshchaniia po toplivu

Meteorologicheskii vestnik

Petrogradskie vedmosti

Russkie vedomosti

Vestnik Nikolaevskoi zheleznoi dorogi

Vestnik Vladikavkazskoi zheleznoi dorogi

Zheleznodorozhnaia zhizn' na Dal'nem Vostoke

Centre des Archives diplomatiques, La Courneuve, Paris: series Guerre 1914–1918

Linda Hall Library, Kansas City, MO: on-line exhibition 'The Land Divided, The World United: Building the Panama Canal': <http://panama.lindahall.org/century-progress/> (last accessed 29 February 2016).

National Archives, London:

Foreign Office General Political Correspondence (FO371)

War Office: Directorate of Military Operations and Military Intelligence, and Predecessors: Correspondence and Papers (WO106)

Rossiiskii gosudarstvennyi istoricheskii arkhiv (RGIA), St Petersburg:

f.32 Sovet s"ezdov predstavitelei promyshlennosti i torgovli

f.229 Kantseliariia Ministra putei soobshcheniia

f.268 Departament zheleznodorozhnykh del

f.269 Glavnyi Inspektor MPS

f.273 Upravlenie zheleznykh dorog MPS

f.1276 Sovet Ministrov

Library, Pechatnye zapiski

Service historique de la Défense, Vincennes, Paris: series N 1872–1919, section 7N (EMA et Attachés Militaires)

Notes

¹ An earlier version of this paper was presented at the XLII Conference of the Study Group on the Russian Revolution, Northumbria University, UK, Jan 2016, and a shortened version of that paper was published as 'Turetskie proliivy, velikaia voina i fevral'skaia revoliutsiia' in B.I. Kolonitskii and D. Orlovski (eds), *Epokha voin i revoliutsii (1914–1922): Materialy mezhdunarodnogo nauchnogo kollokviuma 9–11 iiunia 2016 g.* (St Petersburg: Nestor-Istoriia, 2017). Russian dates are shown in the old style (Julian calendar) unless otherwise indicated; for clarity some dates are given in both old and new styles. Certain familiar place names and names of railways have been translated.

² N. Stone, *The Eastern Front, 1914–1917* (London: Hodder and Stoughton, 1975); W.B. Lincoln, *Passage through Armageddon: The Russians in War and Revolution, 1914–1918* (Oxford: Oxford University Press, 1994) (first published 1986); J. Sanborn, *Imperial Apocalypse: The Great War and the Destruction of the Russian Empire* (Oxford: Oxford University Press, 2014). There are several military histories of this war and vast literatures about one aspect, the Armenian genocide, and the Allied campaign at the Dardanelles, but the consensus about the conflict's limited strategic significance remains unchallenged.

³ D. Stone, *The Russian Army in the Great War: The Eastern Front, 1914–1917* (Lawrence, KS: University Press of Kansas, 2015). The Russian army's western front is usually known outside Russia as the Eastern Front, distinct from the Western Front in France and Belgium.

⁴ O.R. Airapetov, *Uchastie Rossiiskoi imperii v Pervoi mirovoi voine (1914–1917): 1915 – Apogei* (Moscow: Kuchkovo pole, 2014).

⁵ M. Reynolds, *Shattering Empires: The Clash and Collapse of the Ottoman and Russian Empires, 1908–1918* (Cambridge: Cambridge University Press, 2011), p.139.

⁶ A.V. Oleinikov, *Turetskii front Rossii, 1914–1917* (Moscow: Veche, 2016). This book, advertised as a scientific-popular work, is a good example of recent Russian nationalist thinking.

⁷ S. McMeekin, *The Russian Origins of the First World War* (Cambridge, Mass.: Harvard University Press, 2011).

⁸ For example: H. Strachan, *The First World War: A New Illustrated History* (London: Simon and Schuster, 2003); D. Stevenson, *1914–1918: The History of the First World War* (London: Penguin, 2005) (especially pp.114–22, where the value of Turkey to the other Central Powers is seen as its diversion of Allied resources); V.L. Mal'kov, G.D. Shkundin et al (eds), *Mirovye voiny XX veka, kniga 1: Pervaia mirovaia voina: Istoricheskii ocherk* (Moscow: Nauka, 2005).

⁹ The scenario of a separate peace is included because it was proposed by the Russian Chief of Staff General M.V. Alekseev on several occasions in late 1915 and early 1916, albeit to no avail. See, for example, R. Bobroff, *Roads to Glory: Late Imperial Russia and the Turkish Straits* (London: I.B. Tauris, 2006), pp.143–4.

¹⁰ A monograph history of the wartime Russian railways is being prepared by the present author. The most important existing studies are: N. Vasil'ev, *Transport Rossii v voine 1914–1918 gg* (Moscow: Voenizdat, 1939); A.L. Sidorov, 'Zheleznodorozhnyi transport Rossii v pervoi mirovoi voine i obostrenie ekonomicheskogo krizisa v strane', in *Istoricheskie zapiski*, vol.XXVI (Moscow: AN SSSR, 1948), pp.3–64; and A.S. Senin, *Zheleznodorozhnyi transport Rossii v epokhu voin i revoliutsii (1914–1922 gg.)*, (Moscow: GOU Uchebno-metodicheskii tsentr po obrazovaniuu na zheleznodorozhnom transporte, 2009).

¹¹ Bad weather is frequently mentioned in contemporary and later accounts of the 1916/17 winter and February Revolution but systematic historical analysis has been lacking. For an attempt to define the nature of the wartime winter weather in European Russia on the basis of official meteorological data see A.J. Heywood, 'Friend or Foe? "General Winter" and Tsarist Russia's War Effort, 1914–17', paper presented to the XL annual conference of the Study Group on the Russian Revolution, University of East Anglia, 3–5 Jan 2014, accessible online at

<http://aura.abdn.ac.uk/handle/2164/8418>. This paper demonstrates how for many areas the 1916/17 winter involved an exceptional combination of unusually low temperatures and unusually high snowfall, not experienced during at least the previous 40 years.

¹² 'Obzor gruzovogo dvizheniia i perevozok za 15–31 ianvaria 1917 goda': Rossiiskii gosudarstvennyi istoricheskii arkhiv (henceforth RGIA), f.273 (Upravlenie zheleznykh dorog MPS), op.10, d.3716, l.21–ob.

¹³ For an initial discussion of how winter weather did affect wartime railway operations see A.J. Heywood, 'Frost and Snow, War and Revolution: The Impact of Winter Weather on Tsarist Russia's Railways, July 1914–March 1917', paper presented to the conference 'Frost, Ice and Snow: Cold Climate in Russian History', German Historical Institute and Rachel Carson Center for Environment and Society, Moscow, 16–18 Feb 2012, accessible online at <http://aura.abdn.ac.uk/handle/2164/8417>.

¹⁴ For an brief overview of Russia's foreign trade at this juncture see M.R. Dohan, 'Foreign Trade', in R.W. Davies (ed.), *From Tsarism to the New Economic Policy: Continuity and Change in the Economy of the USSR* (Basingstoke: Macmillan, 1990), pp.212–33. The origins of the Murmansk project are discussed briefly below, but for detailed recent histories see A.A. Golubev, *Murmanskaia zheleznaia doroga: Istoriia stroitel'stva (1894–1917 gg.): Monografiia* (St Petersburg: PGUPS, 2011) and R. Nakhtigal', *Murmanskaia zheleznaia doroga, 1915–1919 gody: voennaia neobkhdimost' i ekonomicheskie soobrazheniia* (St Petersburg: Nestor-Istoriia, 2011).

¹⁵ For some years the capital and the north-west region had relied on British coal imported through the Baltic as a high-quality yet cheaper alternative to supplies from Russia's main coalfields in the Donbass.

¹⁶ On the Archangel Railway in the First World War see A.J. Heywood, 'The Limits of Competence: Coping with Armageddon on the Archangel Railway, 1913–March 1917 (working paper, accessible online at <http://aura.abdn.ac.uk/handle/2164/8416>). It was also possible, though very slow and not in winter, to reach Vologda by water from Archangel using the Northern Dvina and Sukhona rivers.

¹⁷ Military ships were banned from the Turkish Straits by the London Straits Convention of July 1841:B. Jelavich, *Russia's Balkan Entanglements, 1806–1914* (Cambridge: Cambridge University Press, 1991), pp.96–8.

¹⁸ A.M. Anfimov and A.P. Korelin (comps and eds), *Rossiiia 1913 god: Statistiko-dokumental'nyi spravocchnik* (St Petersburg: Blits, 1995), pp.142–3.

¹⁹ Reynolds, *Shattering Empires*, p.33.

²⁰ The question of Russia's strategic railway investment priorities on the eve of WW1 is complex and requires further research. For some introductory remarks see A.J. Heywood, "'The most catastrophic question": railway development and military strategy in late imperial Russia', in T.G. Otte and K. Neilson (eds), *Railways and International Politics: Paths of Empire, 1848–1945* (London: Routledge, 2006), pp.45–67.

²¹ For an overview of British–Russian relations in this period see K. Neilson, *Britain and the Last Tsar: British Policy and Russia, 1894–1917* (Oxford: Clarendon Press, 1995); and also J. Siegel, *Endgame: Britain, Russia and the Final Struggle for Central Asia* (London: I.B. Tauris, 2002).

²² Ministers of Finance and of Ways of Communication to Committee of Ministers, Report no.915, 10 March 1895, p.16: RGIA Library, Pechatnye zapiski file PZ-2166. Further research is needed to explain this stance. Did it reflect, for example, a concern that the British navy might attack this northern coast, as had happened in the Crimean War?

²³ A shorter route to the northern coast from Rovaniemi in northern Finland was rejected because of the difficulty of crossing the mountain ridge of north eastern Finland: Minister of Ways of Communication to Council of Ministers, Report no.17555, 20 October 1914: RGIA Library, Pechatnye zapiski file PZ-2166.

²⁴ The extent to which the delays at Kushelevka were caused by insufficient tracks or the working practices of the Customs became a matter of dispute: Ministry of Finances Customs Revenue Department to Head of MPS Directorate of Railways, 18 April 1915, and Head of MPS Directorate of Railways to MPS Chief Inspector, 8 May 1915: RGIA, f.269 (Glavnyi Inspektor MPS), op.2, d.88, ll.34–7ob., 33–ob.

²⁵ Additionally, as would be the case at the Swedish–Finnish border, the difference of track gauge between the Russian and Romanian railway systems necessitated the trans-shipment of all transit goods between the Russian and non-Russian wagons.

²⁶ See in particular Nakhtigal, *Murmanskaia zheleznaia doroga, passim*.

²⁷ Doklad Glavnogo Inspektora MPS No.11 and No.12, 8 April 1915: RGIA, f.269, op.2, d.89, ll.57–59ob, 60–ob.; Doklad Glavnogo Inspektora MPS No.30, 14 Oct 1915: RGIA, f.269, op.2, d.90, ll.31–35. The 89mm difference

between the gauges of the Finnish and Swedish tracks meant that goods would have to be trans-shipped at the border station. The connection between the Russian and Finnish railways, including the question of whether to build a bypass of Kushelevka, was a core concern of discussions during 1915–16 about how to develop the Petrograd network. See for instance A. Glavatskii, 'Neskol'ko slov o buduiushchem Petrogradskogo uzla', *Vestnik Nikolaevskoi zheleznoi dorogi*, No.1 (19 March 1916), pp.2–4.

²⁸ G.E. Torrey, *The Romanian Battlefront in World War I* (Lawrence, KS: University Press of Kansas, 2011), pp.1–13. Romania's entry into the war in 1916 caused substantial problems for Russia's hard-pressed transport system, and research is needed to clarify and assess these impacts.

²⁹ See, for example, Zhurnal Raspriaditel'nogo komiteta, no.24, 24 Dec [1914]: RGIA, f.273, op.10, d.3041, ll.222–33ob; Heywood, 'Limits of Competence'. The regauging project was expected to take at least a year.

³⁰ Heywood, 'Limits of Competence'. The main books about Russia's wartime military imports are K. Neilson, *Strategy and Supply: The Anglo–Russian Alliance, 1914–17* (London: Allen & Unwin, 1984); D.C. Rielage, *Russian Supply Efforts in America During the First World War* (Jefferson, NC: McFarland, 2002).

³¹ The landslide is illustrated in the Linda Hall Library on-line exhibition 'The Land Divided, The World United: Building the Panama Canal': <http://panama.lindahall.org/century-progress/> (last accessed 29 February 2016). For a very detailed account of the Russian state's shipping operations from North America to Russia during 1915–18 see 'Otchet o deiatel'nosti Russkogo zagotovitel'nogo komiteta v Amerike i ego likvidatsionnoi komissii', chast' II, tom 1, Otdel po perevozkam, 151pp.: US National Archives, Record Group 261 (Former Russian Agencies), Entry 26, Box L37.

³² Zhurnal Raspriaditel'nogo komiteta, no.41, 28, 29 and 31 March 1915: RGIA, f.273, op.10, d.3041, ll.100–ob.

³³ For example: Zhurnal Raspriaditel'nogo komiteta, no.70, 31 Oct 1915: RGIA, f.273, op.10, d.2987, l.26.

³⁴ Departament zheleznodorozhnykh del Ministerstva finansov, *Svodnaia statistika perevozok po russkim zhel[eznym] dor[ogam]*, 1915 god: *Chai* (Petrograd, 1917), p.l.

³⁵ For example: Deputy Chair of the Board of the Chinese Eastern Railway to the War Ministry Department of Military Communications, 20/22 December 1914: RGIA f.273, op.10, d.2709, l.60–ob; 'Iz Kharbina ezhdnevno otpravliaetsia pochtoi 2 tysiachi posylok chaia', *Zheleznodorozhnaia zhizn' na Dal'nem Vostoke*, No.30 (1916), p.13.

³⁶ See, for example, Osobyi zhurnal Soveta ministrov, 21 November 1914, in B.D. Gal'perina et al (eds), *Osobyie zhurnaly Soveta ministrov Rossiiskoi imperii, 1914 god* (Moscow: Rosspen, 2006), pp.537–8; Zhurnal Raspriaditel'nogo komiteta no.24, 24 December [1914]: RGIA f.273, op.10, d.3041, l.232; Krivoshein (Minister of Agriculture) to Rukhlov, 21 January 1915: RGIA f.229 (Kantseliaria Ministra [putei soobshcheniia]), op.4, d.1774, ll.1–2ob; and Zhurnal Raspriaditel'nogo komiteta no.56, 19 June 1915: RGIA f.273, op.10, d.3041, l.184–ob.

³⁷ Reynolds, *Shattering Empires*, p.112.

³⁸ Reynolds, *Shattering Empires*, p.112.

³⁹ Afonina, *Kratkie svedeniia*, pp. 57, 83; Osobyi zhurnal Soveta ministrov po voprosu o sooruzhenii zheleznykh dorog v Maloaziatskoi Turtsii, 10 May 1912: B.D. Gal'perina et al (eds), *Osobyie zhurnaly Soveta ministrov Rossiiskoi imperii, 1912 god* (Moscow: Rosspen, 2004), pp.187–91. The conclusion about logistical superiority was noted in a 1912 review of strategic railway provision, with relatively little investment proposed for the Caucasus, as for example in: 'Mery po usileniiu seti zh.d. Imperii dlia obespecheniia interesov gosudarstvennoi oborony na piatiletie 1913–1918 gg. [1912]', RGIA f.268 (Departament zheleznodorozhnykh del), op.3, d.1643, ll.204–5. See also A.M. Zaionchkovskii, *Podgotovka Rossii k imperialisticheskoi voine: Ocherki voennoi podgotovki i pervonachal'nykh planov, po arkhivnym dannym* (Moscow, 1926), pp.80, 130–1 and P. Luntinen, *French Information on the Russian War Plans, 1880–1914* (Helsinki, 1984), p.130. By contrast, the Turkish army at the border with Russia relied on supply by road, with the Black Sea port of Trabzon (Trebizond) playing a key role.

⁴⁰ Reynolds, *Shattering Empires*, p.123.

⁴¹ Reynolds, *Shattering Empires*, pp.123–5. The chaotic Russian retreat at the start of this battle led to the request by the Grand Duke Nikolai Nikolaevich, the Russian field Commander-in-Chief, for Britain and France to lend assistance. The Allied plan for an attack at the Dardanelles had its roots here, although the Caucasus Army managed to stabilise its position and regain the initiative within days, long before any practical Allied help could be provided.

⁴² The Navy's ban is mentioned in Borisov (Head of MPS Directorate of Railways) to the Congress of Representatives of the Stock Exchange and Agriculture, 19 June 1915: RGIA f.32 (Sovet s"ezdov predstavitelei promyshlennosti i torgovli), op.1, d.730, l.4. The Georgian military road was also used as much as possible.

⁴³ For example, the oil industry's difficulties with obtaining spare parts by 1916 are described in a report to the War Ministry Department of Military Communications by the Chair of the Council of Congresses of Representatives of Industry and Trade, 20 August 1916: RGIA f.32, op.1, d.695, ll.1–7. Where possible the northbound empty vans were allocated for northbound goods, but often they had to be moved as empties for loading higher priority traffic elsewhere.

⁴⁴ These shipments were closely monitored by the transport ministry, and they had their own paragraph, later sub-section, in the fortnightly reports about freight traffic that were submitted to the Special Conference on Freight Shipments by the MPS from late 1915. See for example: Obzor sostoiianiia gruzovykh perevozok na dorogakh seti za vremia s 16 po 31 marta 1916 g., no.6, 20 April 1916, p.5: RGIA, Pechatnye zapiski file PZ-2094.

⁴⁵ Obshchii prikaz [Nachal'nika Vladikavkazskoi zheleznoi dorogi], no.20, 9 Feb 1915, *Vestnik Vladikavkazskoi zheleznoi dorogi*, No.3 (1 Feb 1915), chast' ofitsial'naia, p.45; 'Khronika', *Vestnik Vladikavkazskoi zheleznoi dorogi*, No.3 (1 Feb 1915), chast' neofitsial'naia, pp.73–75; A. Sokolov, 'K katastrofam na Donu', *Vestnik Vladikavkazskoi zheleznoi dorogi*, no.6–7 (15 March–1 April 1915), chast' neofitsial'naia, pp.152–3; Obshchii prikaz [Nachal'nika Vladikavkazskoi zheleznoi dorogi], no.40, 30 March 1915, *Vestnik Vladikavkazskoi zheleznoi dorogi*, No.8 (15 April 1915), chast' ofitsial'naia, pp.89–90; L. Danilov, 'Obzor pogody v Evropeiskoi Rossii i Zapadnoi Sibiri za ianvar' 1915 g n.st.', *Meteorologicheskii vestnik*, No.2 (Feb 1915), p.68.

⁴⁶ Shuvaev to Rukhlov, 1 April 1915: RGIA f.273, op.10, d.2851, ll.1–2; Zhurnal zasedaniia mezhdudedomstvennogo soveshchaniia, 7 May 1915: RGIA f.273, op.10, d.2851, ll.16–ob.

⁴⁷ For example, *Birzhevye vedomosti*, 11 Feb 1915, pp.2–3; *Petrogradskie vedmosti*, 14 Feb 1915 p.1 and 17 Feb 1915 p.1; *Russkie vedomosti*, 22 Feb 1915, p.2.

⁴⁸ Zhurnal soveshchaniia piati ministrov, No.8, 23 Feb 1916: RGIA, f.1276 (Sovet Ministrov), op.12, d.1240, l.18–ob. This figure equates to about 12,100 wagonloads for grain in sacks (which were in very short supply owing to military requisitions) or perhaps double that number if the grain had to be shovelled loose into the vans.

⁴⁹ Rukhlov to Council of Ministers, 5 March 1915: RGIA f.268, op.5, d.310, l.487.

⁵⁰ Memorandum by O'Beirne, 4 March 1915 (new style): The National Archives, London, Foreign Office General Political Correspondence (henceforth FO371), file 2447, p.118. That said, a month later he worried that the shortage of railway freight wagons would hamper the delivery of goods to the ports for export through the Dardanelles: Memorandum by O'Beirne, 8 April 1915 (new style): FO371, file 2447, p.137.

⁵¹ Strachan, *The First World War*, p.116. The same sentiments were expressed by such senior German military figures as Admiral von Tirpitz in March 1915 and General Ludendorff in his war memoirs: cited in Aspinall-Oglander, *Military Operations*, vol.1, p.vii.

⁵² T. Coates (ed.), *The World War I Collection: Gallipoli and the Early Battles, 1914–15* (London, 2001), p.42.

⁵³ W.S. Churchill, *The World Crisis, 1911–1918* (London: Penguin Classics, 2007), p.297.

⁵⁴ Exhaustive detail about the actual contracts can be found in the archive of the Russian Supply Commission at the US National Archives, together with an unpublished highly detailed overview of the commission's work that was prepared in 1918 for accounting purposes: Otchet o deiatel'nosti Russkogo zagotovitel'nogo komiteta v Amerike i ego likvidatsionnoi komissii' [1918]: US National Archives, Record Group 261 (Former Russian Agencies), Entry 26, Box L37.

⁵⁵ For example: Zhurnal Raspriaditel'nogo komiteta No.70, 31 October 1915: RGIA f.273, op.10, d.2987, l.26.

⁵⁶ Zhurnal raspriaditel'nogo komiteta no.34, 23 February 1915: RGIA f.273, op.10, d.3041, l.79; Zhurnal soveshchaniia po obespecheniiu stolits predmetami pervoi neobkhozimosti, 24 January 1916: RGIA 1276, op.12, d.1239, l.21–ob.

⁵⁷ Draft MPS report to the Council of Ministers, June 1915: RGIA f.268, op.5, d.311, l.268. Total Russian output of hard coal in 1915 was 1,316.4 million puds (21.6 million tonnes) with a monthly average of 109.7 million puds (1.8 million tonnes): calculated from the monthly results at *Izvestiia Osobogo soveshchaniia po toplivu*, No.1 (Dec 1916), p.27.

-
- ⁵⁸ Zhurnal soveshchaniia piati ministrov, No.8, 23 February 1916: RGIA f.1276, op.12, d.1240, l.18–ob. The same source indicates that this grain was later resold to the Ministry of Agriculture for army use because of the need in reality to send west Siberian grain through Archangel.
- ⁵⁹ For details of efforts by the Turkestan authorities during 1916 to have grain moved from the Caucasus and the problems with moving such grain on the Vladikavkaz Railway see RGIA, f.273, op.10, d.3180.
- ⁶⁰ Note, for instance, the numerous articles about refrigeration for shipping fruit and other food goods to Moscow in issues of *Vestnik Vladikavkazskoi zheleznoi dorogi* during 1915.
- ⁶¹ For examples of how the army dominated central policy-making concerning traffic priorities see Zhurnal Rasporiaditel'nogo komiteta no.27, 21 January 1915: RGIA f.273, op.10, d.3041, ll.40–42ob; and no.70, 31 October 1915: RGIA f.273, op.10, d.2987, ll.26–30. These examples concern the distribution of the westbound line capacity from Siberia into European Russia. By contrast a somewhat conciliatory tone became evident during early 1917: see for example Kratkoe reziume soveshchaniia 22-go ianvaria 1917 g. (concerning the economic troubles in the rear): RGIA f.273, op.10, d.3677, ll.1–2.
- ⁶² See in particular the reports by the Catherine (28 [May] 1916) and Southern (27 May 1916) railways to the MPS: RGIA, f.273, op.10, d.3337, ll.56–7ob and 86–ob.
- ⁶³ Senin, *Zheleznodorozhnyi transport*, pp.24, 42–3.
- ⁶⁴ See A.S. Senin, *Ministerstvo Putei Soobshcheniia v 1917 godu*, 2nd edn (Moscow: URSS, 2009), especially pp.47–66.
- ⁶⁵ A. Moorehead, *Gallipoli* (London, 1956), p.364. I am grateful to Jenny Macleod for drawing my attention to this assessment.
- ⁶⁶ P. Gatrell, *Russia's First World War: A Social and Economic History* (Harlow: Pearson, 2005), p.270.
- ⁶⁷ See for example Reynolds, *Shattering Empires*, p.137.
- ⁶⁸ Reynolds, *Shattering Empires*, pp.137–8.
- ⁶⁹ See especially the report of 20 June 1916 about the Russian railways by the British military attaché, Alfred Knox: The National Archives, London, War Office: Directorate of Military Operations and Military Intelligence, and Predecessors: Correspondence and Papers (WO106), file 1080. Generally Knox blamed maladministration for the railway problems. The surviving British military reports are mostly in WO106, with copies of some kept among the diplomats' reports in the Foreign Office General Political Correspondence (FO371). The reports by French diplomatic and military representatives are preserved at the Centre des Archives diplomatiques, La Courneuve, series Guerre 1914–1918; and Service historique de la Défense, Vincennes, series N 1872–1919, section 7N (EMA et Attachés Militaires) (I am grateful to Brandon Schneider for the last reference). Generally, further research is needed concerning the role of extensive military secrecy in shaping and permitting misleading impressions of the performance of the war economy.
- ⁷⁰ Reynolds, *Shattering Empires*, p.138.
- ⁷¹ See Reynolds, *Shattering Empires*, pp.137–8; McMeekin, *Russian Origins*, p.223; Bobroff, *Roads to Glory*, pp.143–4, 147–8.
- ⁷² Cited in O.R. Airapetov, *Uchastie Rossiiskoi imperii v Pervoi mirovoi voine (1914–1917): 1916 god – Sverkhnapriazhenie* (Moscow: Kuchkovoe pole, 2015), p.109.
- ⁷³ Similarly, though beyond the scope of this article, in April 1917 the leader of the liberal Constitutional Democratic Party, P.N. Miliukov, had to resign as the Provisional Government's foreign minister due to his own obsession with the Straits.
- ⁷⁴ For clarification and confirmation of the exceptional character of the 1916/17 winter weather see Heywood, 'Friend or Foe?', *passim*.
- ⁷⁵ See for instance Nick Hewitt, 'Jutland: the battle that won the First World War', *BBC History Magazine*, May 2013, accessible online at <http://www.historyextra.com/article/premium/jutland-battle-won-first-world-war-0> (last accessed 22 March 2017). Britain's National Museum of the Royal Navy entitled its Jutland centennial exhibition '36 hours: Jutland 1916, the Battle that Won the War'.