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"Railroad of Death": History and Archaeology of the German-built Second World War Hyrynsalmi–Kuusamo Railway 1942–1944

Oula Seitsonen¹ and Mari Olafson Lundemo²

Introduction

During the years 1941-1944, the frontal responsibility and military control of northern Finland was held by German troops, as Finland's allies in the fight against the Soviet Union. Operation Barbarossa, Hitler's attack to Soviet Union, was launched partly from Finland in the summer of 1941 with the expectation of a rapid advance eastwards into Soviet territory. However, owing to the poor preparation of the German troops, little military progress was achieved along the meagre or non-existing roads on the Arctic front. The years that Wehrmacht stayed in this northern periphery were therefore spent just as much on construction and development of the local infrastructure as on fighting the Red Army. Large amounts of human and material resources were spent on a myriad of infrastructure projects, such as building roads, bridges, railroads, and airfields.

Among the numerous alliances and collaborations of the Second World War, the Finnish-German wartime relationship was an unlikely match between a small democracy and a large totalitarian regime. Ever since the establishment of the alliance and until the present day, this part of Finnish history has been the source of much ambivalence, and the German presence has been perceived both as a necessary evil and a welcome aid in time of adversity. In the memories and remembrances of local Finns, the members of the many German organisations operating in Finland, from the Wehrmacht soldiers to the engineers of Organisation Todt and members of Waffen-SS, are remembered on the one hand for their kindness towards children, and on the other, for their harsh violence towards prisoners, and anything in between. Given the close contact that many Finns in the northern parts of the country had with these foreigners compared to the official cautiousness towards Germany, it was inevitable that the Finnish perception of these years is not a unified and simple story, but rather a multi-faceted and ambivalent personal experience residing within the individual, family, and local communal memories.

In this article we explore one of the largest German infrastructural undertakings in Finland during the war, the construction of a short-lived narrow-gauge railroad between Hyrynsalmi and Kuusamo in northeast Finland (Fig. 1). This work was started in 1942, using a workforce mainly consisting of multinational prisoners of war (POWs) and forced labourers.³ After much effort, this railway, running through the roadless northern

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³E.g. Westerlund 2008; Lundemo 2020.

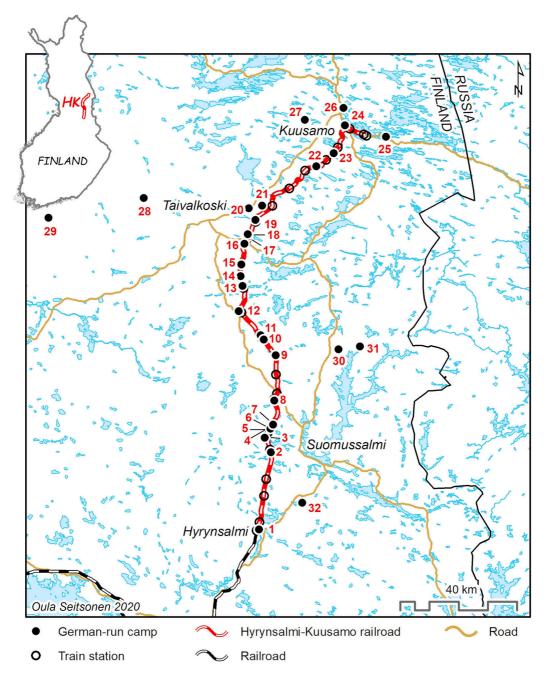


Figure 1. Location of the Hyrynsalmi-Kuusamo railroad (HK), the stations along the railroad line, and the German-run Prisoner-of-War and forced labour camps in the area (numbers refer to Table 2 (Map: Oula Seitsonen; based on Gottwald 1986, 283; Otto n.d.; Westerlund 2008; Kallioniemi 2018a. https://kenttarata-feldbahn.weebly.com/; Kainuun liitto 2019; Lundemo 2020; Seitsonen 2020.).

wilderness, was taken into use in the spring of 1944, only a few months before the Finnish-German alliance ended in September that year. As part of their rapid retreat from Finland, the German troops widely used scorched earth tactics to destroy the infrastructure they had spent years building up. Military installations, official buildings and private property were widely destroyed, as nothing that could be of use for the pursuing Finnish and Soviet troops was to be left behind. This ruinous activity also included destroying the Hyrynsalmi-Kuusamo railway, as well as torching villages along it.

After the war, the Soviet Union demanded that the Finnish authorities remove the remaining railroad tracks and other material from the Hyrynsalmi-Kuusamo area as part of the war reparations paid by Finland. Despite the attempts to erase the railway from the Finnish landscape, it has continued to live in and haunt the memories of the people connected to the project. The remembrance of this project is somewhat bipolar, on the one hand, as a symbol of technological prowess and modernising under extremely difficult circumstances, and on the other hand, as a symbol of the oppressive Nazi German regime and their disdain for human value and human life. In the local vernacular the railway is often remembered as the "Railroad of Death", owing to the large numbers of POWs and forced labourers who lost their lives when building it, and has been called the "longest graveyard in Finland".⁴

In this paper we map what is nowadays known of this, on the national-level somewhat forgotten, railroad and the various engagements with it both during and after the war. This review is based on transdisciplinary reading of three types of source materials from different perspectives: 1) historical and archival sources, 2) ethnographic sources, and 3) archaeological and material culture sources. Put together, these kaleidoscopic materials and perspectives can provide a more holistic understanding of the railroad, its heritage value, and research potential, and can serve as a basis for more in-depth analysis in the future. This article contributes to the ongoing discussions on the importance of the Second World War material remains, both in Finland and internationally. This review lays a foundation for future multidisciplinary research of the "Railroad of Death" and the various issues surrounding it. Throughout the post-war decades these were largely ignored on the national-level, but on the local-level important and well-remembered. Besides local and national importance, the material traces of the railroad represent the global orphan and "dark heritage" of the multinational Second World War heritage of Germans and their prisoners in this northern periphery.

Building and Destroying the Railroad of Death

For the Wehrmacht troops stationed in northern Finland and Finnish Lapland between 1941 and 1944, the area posed extreme, almost insurmountable challenges. The insufficient infrastructure meant that military operations were outright hindered, and the optimistic plans for a rapid German advance towards Murmansk came to nothing. Instead, in the far north the Wehrmacht experienced an endless struggle trying to ensure the mobility of the

⁴ Railo 2004.

⁵ E.g. Herva 2014; Thomas et al. 2016; Thomas et al. 2019.

⁶ E.q. Price 2005; Seitsonen & Herva 2011; Koskinen-Koivisto & Thomas 2017; Seitsonen 2018.

troops, and, just as importantly, to keep the vital supply lines open to the front lines east of the present day Finnish-Russian border. This resulted in numerous German construction projects on Finnish and Soviet territory. Majority of these were heavily influenced by the harsh climate and difficult terrain of these northern areas.

One of the largest projects was the Hyrynsalmi-Kuusamo railway project, a railway line which was intended to ease the supply of the German troops at the Kiestinki-Louhi front. Since 1941 Kuusamo had been the site of an "Armeeverpflegungslager", a major storage site for the Wehrmacht, as well as a fuel storage. Being the only settlement of any size in the wider region, combined with being the starting point for a road leading east to the front, Kuusamo functioned during the war as a centre of activity for the Germans in this area. The German army experienced major difficulties with supplying the troops on the Kiestinki-Louhi front. The supplies arrived at the ports in the northern areas of the Gulf of Bothnia, and from there they were transported by train to Rovaniemi. There the goods were reloaded again, this time onto trucks, which then drove southeast to Kuusamo. The consequence of this was that Rovaniemi was overloaded, this route was both time consuming and costly, and there was a lack of trucks, fuel, and spare parts. Given the poor state of the roads, which damaged the vehicles, and the amount of traffic in and out of Rovaniemi, it became important to establish a supply line for the Kiestinki-Louhi front which did not go through this city and did not require extensive use of trucks.

Railways were a good alternative to building and maintaining roads, and the Wehrmacht had in 1941 plans to build an over 500-km long narrow-gauge railway in Finland from Rovaniemi to Petsamo, to run parallel with the Arctic Ocean Road connecting them. However, Organisation Todt (OT), the German engineering organisation which was given the task of constructing the field railway, viewed the project less than optimistically. When also Finnish authorities voiced strong reservations against a German project of this size on Finnish soil, this plan was set aside, and the Germans continued to struggle with the extensive traffic on the overloaded Arctic Ocean Road. Analogous plans for an "Arctic Ocean Railroad" have recently surfaced again in the 2010s and encountered fierce opposition from many of the locals, especially from the Sámi reindeer herders whose lands the railway would cut. This illustrates the long-standing issues related to north-south dichotomies, land ownership, and land-use in northern Finland and Lapland. These tie in with the area's long colonial past and southern dominance, which still causes friction between the competing subsistence regimes, such as the locally-based reindeer herding and the large-scale extractive industrial and tourism enterprises that are typically owned and controlled by the outsiders from southern Finland or from abroad.9

When the Germans approached Finnish authorities again in the spring of 1942 asking permission to construct the Hyrynsalmi-Kuusamo railway instead of the Rovaniemi-Petsamo Railroad, Rautatiehallitus (Finnish Railroad Administration) responded more positively. The Hyrynsalmi-Kuusamo railway was also a narrow-gauge railway with a track width of 750 mm, but otherwise a considerably smaller undertaking than the Rovaniemi-Petsamo railway. The plans were prepared for about 178 km long line running roughly parallel to

 $^{^7}$ Bundesarchiv-Militärarchiv, Freiburg, Germany (hereinafter BA-MA), RH2020-190, War diary, AOK Norwegen, Bef.St. Finnland, O.Qu., 7.11.41.

⁸ See Seitsonen & Moshenska 2021.

⁹E.g. Herva et al. 2020.

the Finnish-Soviet border. In addition, these plans would permit the Germans to link this railway with the existing Finnish railway network running from Oulu to Hyrynsalmi. Any goods arriving in the port of Oulu had to be reloaded in Hyrynsalmi onto wagons fitted for the narrow-gauge line, but would still represent an improvement of the German supply lines and increase their transport capacity.

Although the formal agreement between Finnish and German authorities was not signed before September 1942, 10 work on the Hyrynsalmi-Kuusamo railway started already in the summer that year. The railway line was built jointly by the Wehrmacht and OT, in one of the rare occasions where these two organisations cooperated directly on a construction project in Finland. However, the Hyrynsalmi-Kuusamo railway was yet another German construction project in Finland which was planned without proper consideration of terrain and climate, and thereby this project, as so many others, was significantly delayed from the German plans. This field railway was by far the longest that the Germans built in Finland, otherwise they built only quite short and sometimes even narrower field railways, such as 600 mm wide lines of 6 km each at Tornio and Misi. 11

Before the Germans came along, Finnish authorities had already made plans for an extension of the domestic railway network between Hyrynsalmi and Taivalkoski. Some groundwork on the line had already been carried out, and the Wehrmacht could lean on this work. As Wehrmacht and OT were separate organisations used to perform projects in their own way, the construction of the railway was split into a southern and a northern section, to be performed by OT's subunit Bauleitung Kuusamo and building units from the Wehrmacht respectively. From the beginning the project was characterised by wildly exaggerated and optimistic schedules. The first plans stipulated that the line should be ready until Taivalkoski by October 1942, and to Kuusamo in December. In reality, the work on the line continued well into the year of 1944.

Besides the schedules, another challenge for the railway project was access to resources, such as building materials, equipment, and labour. German logistical network reached over hundreds of kilometres from the Mediterranean to the Arctic Ocean, and the German building programmes all over the occupied and allied Europe were enormous. It appears that the logistics were not always planned in the most logical way, as for example prefabricated concrete construction elements were transported along the poor transportation line from Central Europe to northern Finland, alongside living cows, alcohol drinks, and other foodstuff. Some of the logistical absurdities at the Hyrynsalmi-Kuusamo included the import of ready-made (metal) sleepers for railroad building from Germany into the wooded northern Finland. See the school of the logistical absurdities at the Hyrynsalmi-Kuusamo included the import of ready-made (metal) sleepers for railroad building from Germany into the wooded northern Finland.

Already from August 1942 the work on the railway was slowed down due to the lack of vehicles and labour, and Finnish reports stated that due to the limited labour it was impossible to keep the tight schedule that the Germans had set for the project. ¹⁶ This situation

¹⁰ Kansallisarkisto, Helsinki, Finland (hereinafter KA), T-17944/23, "Abkommen über den Feldbahnbau Hyrynsalmi-Kuusamo", signed by Ferdinand Jodl for AOK 20 and Jalmar Castrén for Rautatiehallitus, 3.9.42.

¹¹BA-MA, RH2020-307, Armeepionierführer, activity report, 1.4.–30.6.42, 15.7.42.

¹²BA-MA, RH2020-216, AOK 20, O.Qu./Qu.1, "Überblick über die Versorgungslage 1.9.1942."

¹³KA, T-17215/2, report from Colonel Willamo to General Heinrichs, 29.9.42.

¹⁴E.g. Seitsonen 2020, 129–134; Westerlund 2008.

¹⁵KA, T-17215/2, report from Colonel Willamo to General Heinrichs, 29.9.42.

 $^{^{16}}$ KA, T-17215/2, attachment No 2 to report from Colonel Willamo to General Heinrichs, "Org. Todt'in auto-

did not improve over time, and in July 1943 the Germans noted that a faster construction of the railway was not possible due to the lack of workers.¹⁷ As with any other German construction project in Finland during the war, the construction of this railway depended heavily on labour brought in from abroad. 18 The numbers of workers varied over the years, but according to an overview from April 1943 about 5600 people were working on the Hyrynsalmi-Kuusamo railway. Of these, over 2000 were POWs, more than 600 Polish civilian labourers, and 116 Finnish workers. The POWs and Polish labour were kept in camps by the Germans and while the former group were entirely made up by forced labour, the latter group consisted of people who had volunteered, were tricked into, or outright forced to work for the Germans. The Finns were a separate category entirely, as they had volunteered for the work, and were provided with such good salaries that Finnish authorities had to set up a system to regulate the large amounts of Finns wanting to work for German agencies.¹⁹ Besides these categories of labour there were a group of over 2000 workers, consisting of Germans as well as men from a number of other European countries, in addition to work leaders and officers. The non-German workers in this latter category and the Polish labourers mentioned above were working for OT, and were a mixture of volunteers and forced labourers.²⁰ Due to the shortage of labour, also German convicts were sent to work on the railway from 1942 onwards. This caused issues with the local population who got the impression that these convicts were men originating from the German army stationed in Finland who had committed violations on Finnish soil, although for the majority this was not the case.²¹

The labour used to construct the railway was thus a very diverse group living under different conditions depending on their status within the German war machinery and the Nazi ideological hierarchy. The struggle of the labourers and POWs has to a large extent not been recorded for the aftertime, and we have very few written accounts on how the workers and perhaps particularly the POWs were handling the work and surroundings in the camps and work sites along the railway line. An exception is the published memoirs of Polish forced labourer Josef Molka, in which he describes the daily life and hardships faced by the POWs and forced labourers in the harsh conditions of northern Finland.²² Molka recounts how differently he and the other Polish workers were treated compared to the Soviet POWs, and what a shocking sight it was to observe desperate POWs digging in garbage dumps in search of anything edible.²³ The conditions of the Soviet POWs working at the Hyrynsalmi-Kuusamo railway were by all accounts appalling, something that was recorded by the Germans themselves. For instance, in September 1942 one of the POW camps along the railway line was reported to be in a bad condition, with miserable accommodation and insufficient food. The camp at Isokumpu was described as catastrophic, and the Germans

tarve ja -huolto", 5.11.42; KA, T-5471/2, activity report from Lieutenant Krantz to Colonel Willamo, 8.-15.8.42.

¹⁷BA-MA, RH2020-301, AOK 20, Q.Qu./Qu.1, "Beurteilung der Versorgungslage", 8.7.43.

¹⁸E.g. Westerlund 2008; Lundemo 2020.

¹⁹ Lundemo 2020, 265-268.

 $^{^{20}}$ BA-MA, RH2020-269, Kdr.d.Bautr. 6, "lst- und Einsatzstärken stand vom 25. April 1943."

²¹ KA, T-17215/2, report from Colonel Willamo to General Heinrichs, 5.11.42.

 $^{^{22}}$ Molka 2007, see for example p. 39–40.

²³ Molka 2007, 46; also Seitsonen et al. in press.

inspecting these camps stated that those in charge of the POWs were lacking any sense of responsibility for keeping these men healthy and fit for the work they had to perform.²⁴

The boggy and uneven terrain, and the extreme climate worked against the German plans and timetables. Both the guards, the prisoners, and the various labourers alike suffered especially badly during the cold winter months through which they kept on building the railroad in poor clothing and with insufficient accommodation, as Molka points out in his memoirs. This is supported by a contemporary Finnish report that states that the work capacity of German, Polish, and POW labour was poor, because they spent the days shivering and freezing, and even the hard work could not make their bodies warm. To blame for this was the long and cold Finnish winters, as the workers spent all their energy keeping warm and surviving through the workdays, with daylight cut short by the polar night. The harsh discipline, poor treatment, and often inhumane work conditions of the POWs are the aspects that are typically emphasised in the local people's wartime memories of the Hyrynsalmi-Kuusamo railroad, and also elsewhere in northern Finland and Lapland.

Despite endless struggles with lack of resources, challenging conditions, and overly optimistic schedules, the work with the railway continued through the years. One challenge was that the line was first constructed during the winter, so that when the ground frost melted in the spring of 1943 the finished parts of the track were uneven and in a poor condition.²⁷ The wet, boggy terrain and the poor quality of foundation for the tracks running through it meant that the line was not in a working condition, which is underlined by the fact that the railway embankments broke down in several places in the wetlands, and for example in May 1943 one of the valuable locomotives went off the rails and half sunk in a bog.²⁸

In the autumn of 1943, the railway was still described as being in a relatively poor condition. Several smaller sections of the track were unfinished, but what was worse, the railway line was deemed in general not to be fit for its purpose.²⁹ In addition there were also plans to extend the line eastwards towards Kiestinki, but in the end only a few kilometres of this sidetrack was constructed.³⁰ Despite all this, and after a massive building effort effort the southern section of the railway was taken into use gradually from October 1943. From February 1944 the track could transport 120 tons a day, which was increased to the goal of 400 tons a day by June 1944, when 12–15 trains travelled along the now finished line daily.³¹ Although the railway line was built on Finnish soil, it was clearly seen as German property by both parties involved. The trains running along the line were not only planned to carry goods, but the wagons could also be fitted with roofs to carry people. However, the Finns

²⁴BA-MA, RH2020-224, activity report for AOK 20, Qu. 2, 1.9.–30.9.42, signed Prinz Hessen, 8.9.42.

²⁵ KA, T-5471/11, attachment from Lieutenant Jaakkola, "Selitys karttaliitteeseen No 3", undated, probably from March 1943; KA, T-5471/12, activity report from Lieutenant Jaakkola to Lieutenant colonel Voss for 7.2.–19.2.44.

²⁶E.g. Westerlund 2008; Seitsonen et al. 2017.

²⁷ KA, T-5471/11, attachment from Lieutenant Jaakkola, "Selitys karttaliitteeseen No 3", undated, probably from March 1943; KA, T-5471/11, travel report Rovaniemi-Hyrynsalmi 3.3.–6.3.43 from Lieutenant Jaakkola.

²⁸KA, T-5471/11, activity report from Lieutenant Jaakkola "Kertomus havainnoista ja kokemuksista Kuusamosta ja Taivalkoskelta ajalla 19.5.–22.5.43"

²⁹ KA, T-5471/11, attachment No 1 to report from Lieutenant Jaakkola to Major Väänänen for period 26.7.–5.8.43, regarding trip to Kuusamo and Taivalkoski 2.–4.8.43.

³⁰ KA, PK1830-1, Major Väänänen's postwar report, 7.9.47, 217; KA, T-5471/12, activity report from Lieutenant Jaakkola to Colonel lieutenant Voss for 7.2.–19.2.44.

³¹ Lundemo 2020, 167.

	Distance from				
Station	Hyrynsalmi (km)	Notes	PoW/Labour camp		
Hyrynsalmi	0	Train maintenance station, supply depot; German station area known as the "Berlin line"	Yes		
Hyrynjärvi	3,4		No		
Hallavaara	12,5		No		
Laaja	18,6		No		
Pesiökylä	28,8		Yes		
Syrjä	38,5		Yes		
Vääkiö I	47,6	Train maintenance station	No		
Vääkiö II	49,8	Freight station	Yes		
Junnojärvi	56,6		No		
Lippo	65,2		Yes		
Leino	74		Yes		
Korvua	83,9		Yes		
Yli-Outujoki	93,6		Yes		
lijoki	102,1		Yes		
Isokumpu	110,2		Yes		
Harjajoki	119,1		Yes		
Inkee-Süd	127,5		Yes		
Inkee-Nord	137,4		No		
Käsmä	146,3		No		
Penttilä	155		No		
Säkkinen	161,3		Yes		
Kuusamo I	170,5	Betriebsbahnhof	No		
Kuusamo II	171,2	Güterbahnhof, freight station	Yes		
Vanttaja I	176,8	Futterbahnhof, fodder station	No		
Vanttaja II	178	Luftwaffenbahnhof, Luftwaffe station	No		

Table 1. Stations of the Hyrynsalmi-Kuusamo railroad (see Figure 1) (Based on Gootwald 1986, 283; Otto n.d.).

Nr.	Municipality	Location	Archival notes	Nr. of PoWs ^{1, 4}	Archaeological studies
1	Hyrynsalmi	Hyrynsalmi	3./156, Feld.Str.Lg. III, Finn. ZivArb., PoWs $\left(\text{Kgf.}\right)^2$	230	Survey 2020 (OS)
2	Suomussalmi	Pesiökylä	PoWs ¹	54	Survey 2014 (NBF), 2020 (OS)
3	Suomussalmi	Rapuanvaara	German name "Rapuvaara", 2 Ukrainians (Ukrainer) ³		No
4	Suomussalmi	Kukkarovaara	,		Survey 2014 (NBF), 2020 (OS)
5	Suomussalmi	Sarvikangas 1			Survey 2014 (NBF), 2020 (OS)
6	Suomussalmi	Sarvikangas 2			Survey 2014 (NBF), 2020 (OS)
7	Suomussalmi	Syrjä	German name "Syriö/Syrie", PoWs2	126	Survey 2020 (OS)
8	Suomussalmi	Vääkiö II	1.(K)/429, German name "Vekyö/Vääkiö II", PoWs (Kgf.) ²	149	Survey 2014 (NBF), 2020 (OS)
9	Suomussalmi	Lippo	4./68, PoWs ¹	90	Survey 2020 (OS)
10	Suomussalmi	Leino, Saarinen	German name "Leino-Süd", PoWs ²	81	Survey 2014 (NBF), 2020 (OS)
11	Suomussalmi	Leino, Saarivaara	2./62, 3./62, German name "Leino-Nord", PoWs (Kgf.) ²	24	Survey 2014 (NBF), 2020 (OS)
12	Taivalkoski	Korvua, Palokumpu	1./62, 2.(K)/429, PoWs (Kgf.), ² Feld.Str.Lg. II, ³ SS troops? (local memories)	85	Survey 2009 (NBF)
13	Taivalkoski	Tervajoki, Oudonkangas	German name "Outujoki", 1 Ukrainian PoWs3		Survey 2009 (NBF)
14	Taivalkoski	Hiltusenmurto			Survey 2009 (NBF)
15	Taivalkoski	lijoki	PoWs ¹	99	No
16	Taivalkoski	Metsäkylä Isokumpu	3./901, O.T., Polish workers (Polen), ² PoWs ¹	59	Survey 2017 (OS)
17	Taivalkoski	Mustanlinnunlampi			Survey 2010 (NBF)
18	Taivalkoski	Salmisenkangas 3			Survey 2010 (NBF)
19	Taivalkoski	Harjajoki, Peuralampi	O.T., PoWs ¹	148	Survey 2010 (NBF)
20	Taivalkoski	Kaupinkoski			Survey 2010 (NBF)
21	Taivalkoski	Inkee, Satasaari	German name "Inkee-Süd", 1.(K)/191, O.T., Polish workers (Polen), PoWs (Kgf.) ²	92	Survey 2010 (NBF)
22	Kuusamo	Penttilänvaara, Kellarikunnas	German name "Pentilä", 1./191, O.T., PoWs $\left(\text{Kgf.}\right)^2$	322	Survey 2014 (NBF)
23	Kuusamo	Säkkinen	PoWs ¹		No
24	Kuusamo	Sänkikangas	O.T., PoWs ²	258	No
25	Kuusamo	Kuusamo-Kiestinki Road 20 km	O.T., PoWs ²		Survey 2020 (OS)
26	Kuusamo	Kuusamo	ZL Kuusamo/Stalag 309, 2./1912		No
27	Kuusamo	Kaikkonen ³	•		No
28	Pudasjärvi	Kaivoslampi			No
29	Pudasjärvi	Iso Niemenmaa			Survey 2010 (NBF)
30	Suomussalmi	Pihlajakorpi			Survey 2014 (NBF), 2015 (OS)
31	Suomussalmi	Perkkiönpuro			Survey 2014 (NBF)
32	Suomussalmi	Kerälänkylä, Sakarajärvi			No

¹ In June 1944, based on Gottwald 1986, 283.

Archival notes: Markings from a map dated January 31, 1943; Feld.Str.Lg.= Field punishement camp; Kgf.= PoWs; Finn. Ziv.-Arb.= Finnish civilian workers

Archaeological studies: NBF= National Board of Forestry; OS= Oula Seitsonen

Table 2. POW and work camps in the area (see Figure 1).

² Otto n.d.

³ Westerlund 2008.

⁴ Kallioniemi 2018.



Figure 2. Original caption: "Field railroad in snow". A German military train loaded with bales of hay somewhere along the Hyrynsalmi-Kuusamo railroad. (Photograph: Bundesarchiv, Bild 1011-107-1312-20 / CC-BY-SA 3.0.)

had to negotiate with the Germans to transport Finnish troops, civilians, or goods along the line.³²

Although it was claimed that the Hyrynsalmi-Kuusamo railway made a difference in the struggle to supply the troops on the Kiestinki-Louhi front, the troops positioned at this front sector in fact required supplies of 1000 tons a day. In addition, the railway was in normal operation, more or less, only for about three months before the breakup of the Finnish-German alliance in September 1944. During their subsequent retreat from Finland, the German troops destroyed the railroad and its structures, such as bridges, stations, and locomotive garages, most of their archives, and the surrounding civilian infrastructure as part of their scorched earth tactics in mid-September 1944. In the area surrounding the-Hyrynsalmi-Kuusamo railroad, Germans destroyed from 15 to 65 percent of the public and private buildings, worst in Kuusamo where over 2000 buildings were annihilated, including the local church. They also laid masses of mines and other explosives along the railroad line and their retreat routes, which claimed the lives of numerous people after the war. The aim was to slow down the expected Soviet invasion of Finland, a fear that was materialised in this part of Finland. As part of the Finno-Soviet cease-fire treaty the Soviet troops occupied portions of Suomussalmi and Kuusamo municipalities, and possibly also the northern parts of Hyrynsalmi, after the Germans had left. At least in Kuusamo and Inari the occupying

³² KA, T-17944/23, agreement on the transport of Finnish goods on the Hyrynsalmi-Kuusamo railway, signed Ferdinand Jodl and Colonel V. A. 27.12.43/4.1.44; KA, T-17215/2, report to General Heinrichs from Colonel Willamo, 21.10.42.

Soviet troops stayed on the Finnish side of the border well after the end of the Second World War, until late-1945.³³

Afterlife and Memory of a Nazi German Military Railroad

After the war, the Soviet Union demanded that the Finns handed over all the military and other materials left behind by the German forces as part of the war reparations Finland had to pay. According to the peace agreements the Hyrynsalmi-Kuusamo railway, which had already been destroyed by the Germans in 1944, was finally completely dismantled and transferred to the Russians by 1947.³⁴ After the dismantling of the railway line, the railroad and its memory fell into oblivion from a national and official perspective and was largely forgotten for decades, like other material reminders of the German presence in Finland. In the new post-war political situation, the material traces and memories of Finns siding with the Nazis in their fight against the Soviet Union were dismissed, practically until the collapse of the Soviet Union.³⁵ Also, from a southern perspective these events took place in a peripheral northern wilderness and were easy to neglect, illustrating some of the continuing north-south tensions in Finland. Northern people often perceive that the dominant southern authorities neglect their local heritage, which links with the long history of, for instance, south-based extractive industries appropriating the northern resources.³⁶

At the end of the war and during their retreat, the Germans destroyed large parts of their archives, something which could have made historical studies of the Hyrynsalmi-Kuusamo railway challenging. However, by combining German and Finnish wartime documents, as shown in this article and other recent research, it is possible to outline and discuss the work on the railroad in some detail.³⁷ In many cases, the railroad has been mostly remembered and discussed in popular presentations with a local and humane emphasis, such as memorial books and history enthusiasts' websites,³⁸ and on the other hand, from a technical standpoint by railroad enthusiasts.³⁹ Also, documentary films have been made about its history from a local perspective.⁴⁰ Locally the memory of the German presence and its material traces appear to form an integral part of the northern transgenerational memoryscape and long-term cultural landscape.⁴¹

During the years 2015-2020, the Universities of Helsinki and Oulu ran a research project "Lapland's Dark Heritage", as part of which also Hyrynsalmi-Kuusamo Railroad

³³ KA, T-17944/23, letter from the Ministry of Defence to the Ministry of Transport and Public Works, 11.3.1945; Ursin 1980; Kulju 2014; Seitsonen 2020, 68–69.

³⁴Karjalainen 2008; Heino 2018.

³⁵ See Seitsonen & Herva 2011; Herva 2014; Seitsonen 2018.

³⁶ Seitsonen 2020, 233.

³⁷ Lundemo 2020, Kauhanen 2021.

³⁸ E.g. Molka 2007; Karjalainen 2008; Kauhanen 2012; Kallioniemi 2018a, https://kenttarata-feldbahn.weebly.com/;

³⁹E.g. Haro 1990.

⁴⁰Koivisto 1999; Railo 2004; Sironen 2018.

⁴¹ Seitsonen 2020.

was visited.⁴² Interviews and informal discussions were conducted with a number of locals in Hyrynsalmi and Suomussalmi focusing on their impressions and perceptions about the cultural heritage value of the material reminders of the German wartime presence. Based on the information gathered during these discussions and interviews, we found that for the local people the ruins of the railway line, military encampments, rusting military material, and other wartime structures appear to act as active and living reminders of their personal and family stories and remembrances.⁴³ Transgenerational stories related to the war have been passed on and are actively preserved for the younger generations. This includes even local schoolchildren, who encounter the wartime sites during various wilderness-based activities, such as berry picking, fishing, and hunting with their parents and grandparents. As an example, some small children donated wartime memorabilia kept in their families or found in the forests to one of the first public exhibitions on the railroad organised at the Jokijärvi School in Taivalkoski by local history enthusiasts in 2004.⁴⁴

More recently, however, the younger generations have started to lose this place-bound transgenerational knowledge, which was one of the drivers for the Kainuu Museum to set up a special exhibition called "Many Faces of the Field Railroad - Die vielen Gesichter der Feldbahn" in 2020.45 The museum deemed it as important to highlight and popularise the histories and differing perspectives related to the Hyrynsalmi-Kuusamo railroad.⁴⁶ The exhibition was relatively popular, although towards the end of 2020 the numbers of visitors dwindled as the Covid-19 pandemic started accelerating.⁴⁷ The main aim of this exhibition was to highlight the coexistence and interaction of the Finnish civilians and the German troops, as well as the fates of the multinational POWs. For example, a variety of the wartime artefacts was exhibited illustrating their own small stories about the German presence, such as gramophone records that tell about the soundscapes, and toiletries that highlight the upkeep of personal hygiene in the wilderness.⁴⁸ Overall, the railroad has in recent years been receiving increasing public and media recognition on a national level, alongside the other material remains of the German wartime presence.⁴⁹ Besides the exhibition at Kainuu Museum, one section of the nationally renowned Raatteen Portti Winter War Museum has recently been dedicated to the history of the Hyrynsalmi-Kuusamo railroad. Objects to both exhibitions were mostly donated by the locals, including wartime memorabilia kept throughout the decades by different families, and also finds made by metal detectorists and other people in the wilderness (Fig. 3).

In addition to the objects from local families in the areas near the Hyrynsalmi-Kuusamo railway, new materials and sources for research can and do appear. One remarkable new addition to the local museum collections about the railroad is a chance find made recently in a German antique store, a memorial book of drawings titled "Feldbahnbau Hyrynsalmi-Isokumpu-Kuusamo. PI. Regts.-Stab (Z.B.V.) 6" (Field railroad building Hyrynsalmi-

⁴² E.g. Koskinen-Koivisto & Thomas 2017.

⁴³ See Seitsonen & Koskinen-Koivisto 2018.

⁴⁴ Railo 2004

⁴⁵Personal communication Jarkko Kauppinen, Kainuu Museum, 15.03.2021.

⁴⁶Personal communication Jarkko Kauppinen, Kainuu Museum, 15.03.2021.

⁴⁷ Personal communication Jarkko Kauppinen, Kainuu Museum, 15.03.2021.

⁴⁸ Personal communication Jarkko Kauppinen, Kainuu Museum, 15.03.2021.

⁴⁹ E.g. Ylimaunu et al. 2013; Fast 2017; Fast & Väisänen 2020; Matila 2020; Seitsonen 2020; Väisänen 2020; .





Figure 3. Metal detectorists' finds in the 2020–2021 exhibition about the Hyrynsalmi-Kuusamo railroad in the Kainuu Museum. (Photographs: Kainuu Museum/Jarkko Kauppinen.)

Isokumpu-Kuusamo).⁵⁰ This booklet was donated to the Päätalo Institute in Taivalkoski in 2018.⁵¹ It is a booklet of illustrations by German K. Vollmer, and includes beautifully detailed artwork and poetic textual descriptions about the construction of the railroad and the hardships experienced by its builders.

German troops, and occasionally also some of their forced labourers, ⁵² seem to have been generally fond of such memorial books. ⁵³ The text and drawings of Vollmer's booklet describe the heroic struggle and "...work [of the German] building engineers, railroad men, [and] OT" ("...das Werk, Der Baupionere, Der Eisenbahner, der O.T.") ⁵⁴ to construct a railway through an uncharted northern wilderness "...for the Homeland, Führer, and Nation" ("...für Heimat, Führer und Reich"). ⁵⁵ POW and forced labourer presence and contribution is essentially faded away, although one realistic illustration shows Soviet POWs laying down the railroad tracks through the snow-covered winter wilderness, guarded by German soldiers who are leisurely warming themselves at a fireplace, although no reference is made to the prisoners (Fig. 4). ⁵⁶ The footwear the POWs are wearing in this picture are very familiar to what Josef Molka describes in his memoirs, where he talks about being given wooden shoes,

⁵⁰ Vollmer n.d.

⁵¹Kallioniemi 2018a, https://kenttarata-feldbahn.weebly.com/.

⁵² Ferguson 2018a; Ferguson 2018b.

⁵³ Based on the numerous German Second World War memorial books in the military memorabilia sales. Prices asked of these wartime memorial, photograph and sketch books range from a couple of hundred up to over a thousand Euros.

⁵⁴ Vollmer n.d.; available at Kallioniemi 2018b, https://kenttarata-feldbahn.weebly.com/feldbahnbau-piirus-tusnide.html#.

⁵⁵ Vollmer n.d.; available at Kallioniemi 2018b, https://kenttarata-feldbahn.weebly.com/feldbahnbau-piirus-tusnide.html#.

 $^{^{56}}$ See Seitsonen et al. 2019, 16, for another example of omitting the prisoners in the pictures.

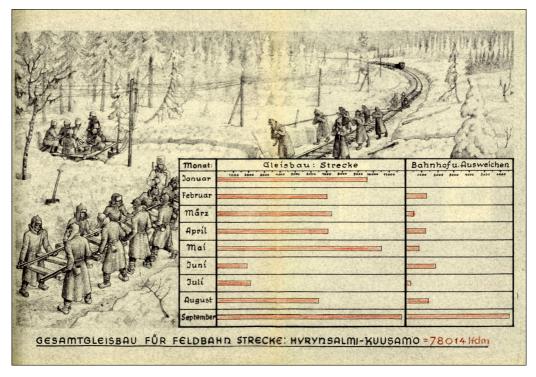


Figure 4. Original caption: "Complete track construction for the narrow railroad line: Hyrynsalmi-Kuusamo = 78 014 running meters". Notice the Soviet POWs laying down the tracks and the German guards wearing what appears to be Swedish white military fur hats. (Figure: Vollmer n.d. © Päätaloinstituutti.)

but no socks. Instead, they wrapped rags around their legs, which gave little warmth. Such rags can also be seen wrapped on the prisoners' legs in the picture.⁵⁷ In another illustration the Soviet POWs struggle in the background dragging spruce tree branches to lay the foundation for the track.⁵⁸ This booklet merits a study of its own, to analyse the ways in which the alien landscape and the building efforts across it were illustrated and recorded in detail by a German military eyewitness.⁵⁹

Local people show nowadays a strong interest and urge in preserving the memories and traces of the German presence, the railroad, and the events surrounding it, as these tie into their own village and family histories. The older generations have generally fond memories of the German soldiers who lived as their close neighbours for nearly four years, despite the destruction they caused during the Lapland War in 1944. Germans are typically recalled as friends and protectors against the Soviet partisans who were attacking isolated wilderness

⁵⁷ Molka 2007, 38.

 $^{^{58}}$ Vollmer n.d.; available at Kallioniemi 2018b, https://kenttarata-feldbahn.weebly.com/feldbahnbau-piirustusnide.html#.

⁵⁹ Vollmer n.d.

homesteads.⁶⁰ On top of this, the German camps exhibited various wonders that many adults or children in this area had hardly seen or experienced before. The soldiers handed out sweet candy to the kids, arranged public movie performances at their camps, played gramophone records, and lighted up their accommodations with generators. Locals have described lively memories of the magic of movies and electric light, as most of this area was electrified only well after the Second World War. Based on local recollections, the close interaction with children seems to also have alleviated the German soldiers' feelings of isolation, dislocation, and separation from their own families, as also the romantic relations with Finnish women.⁶¹

Importantly, besides the lively memories of the friendly interaction and encounters with the Germans, the local memoryscape includes the POW camps and mass graves established along the railroad. Locals maintain strong recollections of the traumatic and poor treatment of the multinational POWs and labourers, and of the exact locations where these events took place, as reminded by the local epithet for the whole project, "Railroad of Death". People who were children during the wartime recall how they had to witness the harsh punishments and even executions of the prisoners. Overall, the local memory culture is nuanced and holds a remarkable duality where the positive and negative memories are juxtaposed and mixed, which contrasts with the lengthy national neglect of the German wartime presence.

Illustratively, most of the historical information about the railroad is nowadays conveyed by local history enthusiasts in popular forms oriented to large audiences. 62 Some of these popular books and websites are really informative and well-maintained sources of detailed historical material, such as the "Kenttärata" (Field railroad) portal maintained by local history enthusiast Tuomo Kallioniemi.63 Three documentary movies have also been shot about the history of the railroad. An international Polish documentary film "Return to Finland" describes the already mentioned forced labourer Josef Molka's wartime experiences and his revisit to the area 60 years later in 2004.64 Two Finnish documentaries "Railroad of Death" from 1999,65 and "Railroad – How the War Came Upon the Wilderness People" from 2018,66 both place emphasis on the local importance and perception of the German presence and its consequences. The latter was produced by the "Museum Association Railroad of War and Peace" that was established by the local history enthusiasts in 2008. This association aims at preserving the memory of the railroad and wartime in the area and arranges many kinds of cultural events in the old Hyrynsalmi Station building that survived the destruction at the end of the war. They, for instance, borrowed a lot of wartime memorabilia to the recent Kainuu Museum exhibition, and maintain their own interesting exhibition of metal detectorists' finds at the Hyrynsalmi Station.⁶⁷

⁶⁰ Seitsonen & Koskinen-Koivisto 2018; Koskinen-Koivisto & Seitsonen 2019; Seitsonen 2020, 54 .

⁶¹ See Seitsonen & Koskinen-Koivisto 2018.

 $^{^{62}}$ But see Karppinen 1979; Heikkinen 1998; Westerlund 2008; Huttunen 2010; Anttalainen 2019; Lundemo 2020.

⁶³ Kallioniemi 2018a, https://kenttarata-feldbahn.weebly.com/.

⁶⁴ Railo 2004; also Molka 2007.

⁶⁵ Koivisto 1999.

⁶⁶ Sironen 2018.

⁶⁷Personal communication Mirja Fagerroos, Museum Association Railroad of War and Peace, 12.03.2021; Personal communication Jarkko Kauppinen, Kainuu Museum, 15.03.2021.

One interesting ethnographic aspect connected to the railroad are the living local 'treasure' stories about locomotives or trains sunk into bogs or lakes by the Germans before their retreat. Several people have reminisced that these could be found at least in Kuusamo's Lake Kenttälampi or River Vanttajajoki next to it.⁶⁸ Stories about the various things that the Germans are told to have hidden in different parts of northern Finland are relatively common, ranging from German General Dietl's kitchen utensils⁶⁹ to guns and locomotives and airplanes.⁷⁰ These ring a bell with the internationally common stories of 'Nazi treasures,' such as hidden gold trains, artworks, and other valuables that hold a fantastic aura in people's minds.⁷¹ However, along the Hyrynsalmi-Kuusamo railroad these stories appear to have some seeds of truth. As mentioned above, the archival material documents at least one case when a locomotive sank into a bog. Also, parts of a large German fodder railway carriage have been found in River Vanttajajoki, which might have onset the stories about the sunken locomotive there.

The local municipalities have also taken a profound interest in getting more recognition to the memory of the Hyrynsalmi-Kuusamo railroad, especially for commercialising this to attract cultural tourism into this peripheral region. They are, for example, developing the cross-border (dark) tourism potential as part of a planned Finno-Russian joint project "Small human in a Great War". 72 Especially Taivalkoski municipality has made serious attempts for establishing the cultural tourism potential of the railroad with information boards, signposted tourism trails, and guided tours to the wartime sites with specialised "field railroad guides" (Fig. 5).73 Also, the Finnish National Board of Forestry (NBF) decided already in 2008 to preserve a 700-meter stretch of the old Hyrynsalmi-Kuusamo railroad line in Taivalkoski as a heritage site for cultural tourism purposes, when it was threatened by plans to build a new road on top of it.74 Parts of the modern railroad follow the wartime railroad line and in other parts the modern forest tracks run along the wartime railroad foundations. This makes it traceable on the current topographic maps and, for most parts, relatively easily accessible. Several geocaches⁷⁵ have also been made along the railroad line since the early 2000s by geocaching activists, who frequently visit these locations as part of their virtual online treasure hunting game. This appears to have become a relatively common and popular way of engaging with and presenting Second World War and other heritage sites in Finland.⁷⁶

⁶⁸ See also Kallioniemi 2020.

⁶⁹ Seitsonen 2020, 200.

 $^{^{70}\,\}mathrm{See}$ Ferguson 2020, for an example from Burma.

⁷¹ See Edsel 2013; Herva et al. 2016; Ferguson 2020.

⁷²Koillissanomat July 4, 2017.

⁷³ "Kenttärata" 2020, http://www.taivalkoski.fi/palvelut/kenttarata.

⁷⁴ Hentilä, *Kaleva* 2008; *Yle uutiset* September 23, 2008.

⁷⁵ "Geocaching" 2020, www.geocaching.com.

⁷⁶ Ihamäki 2012; Seitsonen 2020, 217.



Figure 5. Information board raised by the Taivalkoski municipality at the place of the Isokumpu station under snow in late-April. (Photograph: Oula Seitsonen.)

Archaeology and Material Traces of a Nazi German Military Railroad

In the early 2000s, a discussion was initiated also among the heritage professionals about the culture-historical value and protection of Second World War material remains in Finland. This has been a slow process that is to an extent still ongoing, but some important advances have been made over the past one-and-half decades. Most importantly, the NBF made in 2009 a landmark resolution that they will recognise and protect all the material and immaterial heritage sites on the lands controlled by them up to the mid-1900s as cultural heritage. Due to this, they carried out a massive archaeological survey project of their forest areas in 2010–2014. During the country-wide survey, thousands of Second World War structures were registered, also along the Hyrynsalmi-Kuusamo railroad. As a result of the NBF decision, nowadays also the Finnish National Heritage Agency has started

⁷⁷ Seitsonen 2020, 20–23.

⁷⁸ Taivainen 2013.

⁷⁹ Taivainen 2013.

⁸⁰ Schultz 2009; Kelola-Mäkeläinen & Schultz 2010; Kelola-Mäkeläinen 2014;.

recognising the Second World War localities as "Other cultural heritage sites" that should be acknowledged in land-use planning but are not automatically protected.⁸¹

Besides the NBF surveyors, parts of the Hyrynsalmi-Kuusamo railroad line have been visited in the field by archaeologists from the Kainuu Museum and National Heritage Agency, 82 by retired staff officer Pertti Huttunen, 83 by one of the authors, 84 and by various history enthusiasts. 85 Most of the stations and POW camps known from the archival sources have been at least cursorily checked and some of them mapped in more detail (Table 1–2; Fig. 6). However, there are still long stretches of the track that have not been visited by heritage professionals, and the field surveys should be supplemented in the future. The people living in the area are well-aware of all the material traces linked with the German presence and the railroad in their own landscape. The local transgenerational memories have guided archaeologists to discover many localities in the field that are not known from the wartime documents and maps (Table 2; Fig. 1). Also, analyses of detailed airborne laser scanning and digital elevation model data have helped in locating and mapping the sites in the area. 86 The wide distribution of the recorded sites suggest that the Germans used their workforce dynamically and moved it along the railroad line as the need arose, like they did all over northern Finland. 87

From an archaeological perspective, parts of the railroad and the connected infrastructure are surprisingly well preserved, although generally in more or less flattened state that might not attract a casual spectator's attention (Fig. 5). Many of the military encampments and POW camps hold good research potential for conflict archaeological studies, such as detailed mapping and excavations of rubbish pits, latrines, and building foundations. Spatial and material culture approaches to recent past sites often open new and unexpected perspectives to many seemingly familiar issues. 88 These can shed light, for instance, on the daily living conditions, accommodations, food cultures, and personal relations between the Germans, prisoners, and locals that might be missing from archival material or transgenerational memories.⁸⁹ Already now many of the mapped sites illustrate how much variation there is between different camps, and how for example many of the POW camps have a rather informal and "organic" layout, instead of any "Prussian order" or typical prison camp-like features, such as barbed wire fences or watchtowers.⁹⁰ The Vääkiö II freight station and POW camp area illustrated in Figure 6 is a good example of this tendency. Without the artefacts found for example in the rubbish pits and the local transgenerational memories, many of these localities would be hard to even recognise as Second World War encampments. The superficially haphazard spatial organisation is typical for the many POW

⁸¹ Enqvist 2014; Seitsonen 2020.

⁸² Kainuun liitto 2019, 3-4.

⁸³ Huttunen 2010.

⁸⁴ Seitsonen 2018; Seitsonen 2020.

⁸⁵ Kallioniemi 2018a, https://kenttarata-feldbahn.weebly.com/.

 $^{^{86}}$ See Risbøl et al. 2020; Ikäheimo & Seitsonen 2021; Seitsonen & Ikäheimo 2021; Stichelbaut et al. 2021.

⁸⁷ Westerlund 2008; Lundemo 2020; Seitsonen 2020, 94.

 $^{^{88}}$ E.g. Schofield et al. 2002; Seitsonen et al. 2017; Herva & Seitsonen 2020; Seitsonen 2020.

⁸⁹ E.g. Seitsonen et al. in press.

⁹⁰ See Seitsonen & Herva 2011; Seitsonen 2018.

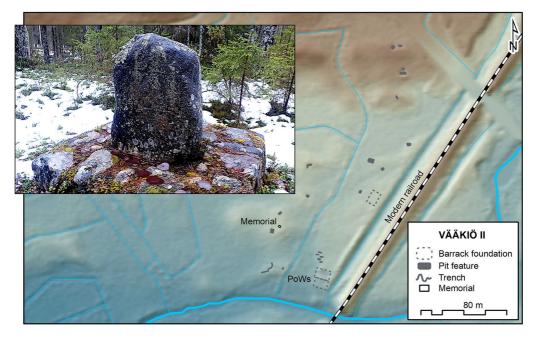


Figure 6. Map of the German-run Vääkiö II POW camp and freight station at Suomussalmi, the modern railroad has been partly built on the wartime railroad foundation. Inset: PoW memorial at the site in early-October, notice the Soviet star on the memorial stone. (Map and photograph: Oula Seitsonen.)

camps that Germans established in northern Finland, where each camp commander seems to have had relative freedom in arranging the camp(s) under his authority.⁹¹

Archaeological and geographical analyses can also seek answers to higher-level questions, for instance, about human-environmental relations and adaptations to an alien northern landscape. In our opinion, the remaining traces of the railroad should be protected as cultural heritage sites for the future study and remembrance. They signify, besides local northern Finnish heritage, also the global orphan, transnational heritage of Germans and their multinational prisoners. The ruins can act as a concrete reminder of the wartime destinies of different groups of people who ended up in this end of the world, as material witnesses of their past actions. The numerous gravesites of prisoners and forced labourers, many of which are currently known only to the locals, should also be devotedly mapped, protected, and honoured with the due respect.

Also, even though the railway was destroyed and dismantled in 1944–1947, not all the German railroad tracks ended up in Soviet Union. According to local information, bits and

⁹¹ Otto 2008; Westerlund 2008; Seitsonen 2020, 103.

⁹²E.g. Ingold 2000; Herva 2014; Seamon 2014; Seitsonen et al. 2017.

⁹³E.g. Price 2005; Seitsonen 2019.

⁹⁴ Seitsonen & Herva 2011; Seitsonen 2020.



Figure 7. Tracks and other parts of the original Hyrynsalmi-Kuusamo railroad found in the wilderness, and now being re-used for building a private narrow track railroad by a Finnish railroad enthusiast Leo Saha. Inset: Krupp factory stamp on one of the tracks. (Photographs: Leo Saha.)

pieces of the railroad are kept as mementos in many farmhouses along the railroad line, and some tracks were also used for building fences after the war. ⁹⁵ Also, it is said that the destroyed and exploded railroad had been so heavily mined and trapped by the retreating Germans, that Finns originally handed over to the Russians other railroad parts, instead of the original Hyrynsalmi-Kuusamo material. When the railroad was finally disassembled in 1947, parts of it apparently ended up re-used in various industrial narrow-gauge railways around Finland.

Most recently, the material memories of the Hyrynsalmi-Kuusamo railroad have surfaced in a narrow-gauge railway building project by a Finnish railroad enthusiast. He is constructing a few hundred meters long private railway on his property, which project can be followed in social media. For parts of his railroad, the builder is using the original Krupp Steel tracks and sleepers, and some railway carriage parts from the Hyrynsalmi-Kuusamo railroad that were found in the wilderness, to remember and honour the wartime railroad project and its builders (Fig. 7).

⁹⁵ Heino 2018.

⁹⁶"LSR – Leo Sahan rautatie", https://www.facebook.com/groups/623932784631257.

Epilogue

From a historical perspective, the Hyrynsalmi-Kuusamo railway is yet another example of the German wartime wishes to manage and overcome Finnish nature, materialised in infrastructural projects costing perhaps more than their worth both in time, building materials, and labour. Regarding the latter, the human aspect of this, the railway project can also be seen as an example of Nazi racial ideology in praxis, performed on allied ground and with Finnish civilians as unwilling spectators. The railroad and its material traces are unique among the German Second World War industrial and building activities in Finland in both its scale and used manpower. It also represents a case study of how the Germans constantly struggled with the challenges set on their military and infrastructural projects on the Arctic Front by the difficult, and at times impenetrable, and alien northern landscape and nature. After the war, the memories and experiences related to the railway lived on, not only in the minds of those working with its construction, whether forced or volunteered, but also in the local transgenerational memories. Its physical traces have become an integral part of the northern cultural landscape and heritage of the war in this part of Finland.

Archaeological mapping of the wartime localities along the railroad track has so far revealed, for instance, that there are many more German and POW installations than were known from the archival sources (Table 2). Most of the new sites and structures have been located based on the transgenerational remembrances and guided by locals who have an intimate knowledge of their ancestral landscapes. On the local level, the memories of the Hyrynsalmi-Kuusamo railroad seem to be kept actively alive by the interplay of material traces and transgenerational recollections. This has been highlighted for example in the recent exhibitions and cultural tourism enterprises that have a strong involvement by local people. Also, it is interesting to observe how the memories of this long-forgotten railroad are surfacing in unexpected contexts, such as the Finnish railroad enthusiast's ongoing narrow-gauge railroad building project that can be followed in social media. 99

The local attempts to bring this long-forgotten railroad project more widely into the national, and also international, sphere appear to be increasingly successful, as demonstrated, for instance, by the NBF's decision to preserve parts of the railroad as protected heritage sites. Our current review provides a basis for future multidisciplinary studies, for instance, on the history of this German railroad project through the northern Finnish wilderness, its material traces, heritage importance, and archaeological research potential.

⁹⁹"LSR – Leo Sahan rautatie," <u>https://www.facebook.com/groups/623932784631257</u>.



⁹⁷E.g. Westerlund 2008; Korpi 2010; Lundemo 2020.

⁹⁸see Seitsonen & Koskinen-Koivisto 2018.

Bibliography

Online sources

Vollmer, K. (first name unknown) n.d. "Feldbahnbaue Hyrynsalmi-Isokumpu-Kuusamo. Pl. Regts.-Stab (Z.B.V.) 6." Memorial booklet, sine loco, Germany. https://kenttarata-feldbahn.weebly.com/feldbahnbau-piirustusnide.html © Päätalo-instituutti.

"Geocaching" 2020. www.geocaching.com.

Kallioniemi, Tuomo. 2018a. "Kenttärata." https://kenttarata-feldbahn.weebly.com/

Kallioniemi, Tuomo. 2018b. "Feldbahnbau piirustusnide." https://kenttarata-feldbahn.weebly.com/feldbahnbau-piirustusnide.html#

"Kenttärata." Taivalkoski. http://www.taivalkoski.fi/palvelut/kenttarata

"LSR - Leo Sahan rautatie." https://www.facebook.com/groups/623932784631257.

Audiovisual sources

Koivisto, Timo. 1999. Kuolemanrata. Hyrynsalmi-Kuusamo kapearaiteinen kenttärata 1942–1944. Documentary movie. Myrsky-Filmi, sine loco.

Sironen, Esa. 2018. *Rata – Kuinka sota kohtasi korpikansan*. Documentary movie. Sodan ja Rauhan Rata ry/Kulttuuriosuuskunta Mielleyhtymä, Taivalkoski.

Newspapers

Hentilä, Anne. "Osa kenttäradasta säästetään." *Kaleva* September 24, 2008. https://www.kaleva.fi/osa-kenttaradasta-saastetaan/2224883.

Kallioniemi, Tuomo. "Makaako Vanttajajoessa räjäytetty veturi? Pentti Suhonen muistelee salaista operaatiota: 'Sinne män, ei kun purrat nousi.'" *Koillissanomat* October 18, 2020. https://www.koillissanomat.fi/makaako-vanttajajoessa-rajaytetty-veturi-pentti-su/3004868

"On ihme, että tämä asiakirja kenttäradasta edes löytyi – kertoo, kuinka rakentajat yllättyivät olosuhteista." Koillissanomat July 4, 2017. https://www.koillissanomat.fi/on-ihme-etta-tama-asiakirja-kenttaradas-ta-edes-loy/459272

Railo, Airi. "Kenttärata - kuolemanrata." Kaleva July 3, 2004.

"Kuoleman rata säästetään Taivalkoskella." *Yle uutiset* September 23, 2008. https://yle.fi/uutiset/3-6112168.

Literature

Anttalainen, Tommi. 2019. Saksalaiset Hyrynsalmella – Ystäviä ja vihollisia 1941–1944. MA thesis, University of Eastern Finland.

Edsel, Robert M. 2013. The Monuments Men: Allied Heroes, Nazi Thieves, and the Greatest Treasure Hunt in History. New York: Little, Brown and Company.

Enqvist, Johanna. 2014. "The New Heritage: A Missing Link Between Finnish Archaeology and Contemporary Society?" Fennoscandia Archaeologica, 31: 101–123. http://www.sarks.fi/fa/PDF/FA31_101.pdf.

Fast, Jan. 2017. "German Transit Camp at Tulliniemi, Hanko 1942–1944." In *Poetic Archaeology/Inside and Beside the Camp*, edited by Jan Kaila and Japo Knuutila: 34–41. Helsinki: The Academy of Fine Arts.

Fast, Jan and Teemu Väisänen. 2020. "Rintama lähimpänä Helsinkiä – Hanko 1941 -hanke." Muinaistutkija, 1/2020: 54–59.

Ferguson, Natasha N. 2018a. "Lappi: rakkaa, sääskiä, liejua, tundraa ja nälkää' - puolalaisen pakkotyöläisen muistokirja toisen maailmansodan ajan Lapista." Raito, 2018: 2–6.

Ferguson, Natasha N. 2018b. "Lapland: bare rock, mosquitoes, mud, tundra and hunger" - an autograph book of a Polish forced labourer in WWII Lapland. *Raito* 2018, separate edition. https://www.rovaniemi.fi/loader.aspx?id=4264c177-a34c-48d4-b7e4-71c601bd68ce.

Ferguson, Jane M. 2020. "Spitfires Sprouting in the Burmese Spring: The Real-life Quest for Historic Fantasy Aircraft in Contemporary Myanmar." TRaNS: Trans-Regional and -National Studies of Southeast Asia, 8 (2): 135–146. https://doi.org/10.1017/trn.2019.11.

Gottwald, Alfred B. 1986. Heeres Feldbahnen. Bau und Einsatz der Militärischen Schmalsspurbahnen in Zwei Weltkriegen. Stuttgart: Transpress Verlag.

- Haro, Matti. 1990. "Kuusamon kenttärata." Resiina, 4/1990: 18-34.
- Heikkinen, Jaakko. 1998. Kenttäradan monet kasvot. MA thesis, University of Lapland.
- Heino, Jarkko. 2018. "Kärsimysten kenttärata." Veljesviesti, 1/2018: 24-27.
- Herva, Vesa-Pekka. 2014. "Haunting Heritage in an Enchanted Land: Magic, Materiality and Second World War German Material Heritage in Finnish Lapland." *Journal of Contemporary Archaeology*, 1 (2): 297–321. DOI: 10.1558/jca.vti2.18639.
- Herva, Vesa-Pekka, Eerika Koskinen-Koivisto, Oula Seitsonen, and Suzie Thomas. 2016. "I have better stuff at home': treasure hunting and private collecting of World War II artefacts in Finnish Lapland." World Archaeology, 48 (2): 267–281. https://doi.org/10.1080/00438243.2016.1184586.
- Herva, Vesa-Pekka and Oula Seitsonen. 2020. "The haunting and blessing of Kankiniemi: coping with the ghosts of the Second World War in northernmost Finland." In Entangled beliefs and rituals: Religion in Finland and Sápmi from Stone Age to contemporary times, edited by Tiina Äikäs and Sanna Lipkin: 225–235. Finnish Archaeological Society: Helsinki. http://www.sarks.fi/masf/masf_8/masf_8.html.
- Herva, Vesa-Pekka, Alix Varnajot and Albina Pashkevich. 2020. "Bad Santa: cultural heritage, mystification of the Arctic, and tourism as an extractive industry." *The Polar Journal*, 10 (2): 375–396. https://doi.org/10.10
- Huttunen, Pertti. 2010. *Sotahistoriallisten kohteiden inventointi*. Research report, Suomussalmen kotiseutuarkisto.
- Ihamäki, Pirita. 2012. "Geocachers: The Creative Tourism Experience." Journal of Hospitality and Tourism Technology, 3 (3): 152–175. https://doi.org/10.1108/17579881211264468.
- Ikäheimo, Janne and Oula Seitsonen. 2021. "Maanmittauslaitoksen uusi ja tarkempi laserkeilausaineisto (Laserkeilausaineisto 5p) kuoppajäännösten tutkimuksessa." Muinaistutkija, 2/2021: 2–18.
- Ingold, Tim. 2000. The Perception of the Environment: Essays on Livelihood, Dwelling and Skill. London: Routledge.
- Kainuun liitto. 2019. Toisen maailmansodan sotahistoriakohteet Kainuun maakuntakaavoituksessa D:4. Kajaani: Kainuun liitto.
- Karjalainen, Raija. 2008. Muistoja kenttäradalta. Taivalkoski: Taivalkosken 4H-yhdistys.
- Karppinen, Pentti. 1979. "Tuntematon rautatie, Hyrynsalmen-Kuusamon kenttärata." *Sotilasaikakauslehti*, 54: 632–635
- Kauhanen, Jouni. 2012. Sotilas, siviili ja sotavanki. Ylä-Kainuun ja Koillismaan traaginen kenttärata. Vaala: Jouni Kauhanen.
- Kelola-Mäkeläinen, Hanna 2014. *Pohjois-Suomussalmi, kulttuuriperintöinventointi 2014*. Research report, National Board of Forestry, Finland.
- Kelola-Mäkeläinen, Hanna and Hans-Peter Schulz. 2010. *Taivalkoski pohjoisosa kulttuuriperintöinventointi 2010*. Research report, National Board of Forestry, Finland.
- Korpi, Kalle. 2010. Rintama ilman juoksuhautoja. Saksalaisten keskeiset rakentamiset, työmaat ja työvoima Pohjois-Suomessa 1941–1942. Rovaniemi: Pohjois-Suomen Historiallinen yhdistys.
- Koskinen-Koivisto, Eerika and Oula Seitsonen. 2019. "Landscapes of loss and destruction: Sámi Elders' Childhood Memories of the Second World War." Ethnologia Europaea, 49 (1): 24–40. DOI: 10.16995/ee.816.
- Koskinen-Koivisto, Eerika and Suzie Thomas. 2017. "Lapland's Dark Heritage: Responses to the Legacy of World War II." In *Heritage in Action: Making the Past in the Present*, edited by Helaine Silverman, Emma Waterton & Steve Watson: 121–133. New York: Springer.
- Kulju, Mika. 2014. "Puna-armeija miehitti Kuusamon 1944." Sotaveteraani, 6/2014: 33.
- Lundemo, Mari Olafson. 2020. Engineering, Resources and Nature: Organisation Todt in Finland 1941–1944.

 PhD dissertation, Department of History and Civilization, European University Institute, Florence, Italy.
- Matila, Tuuli. 2020. "The ghosts in the archive: World War Two photography and landscapes crafted by the Nazis in Finland." *Time and Mind* 13 (4): 351–371. https://doi.org/10.1080/1751696X.2020.1825658.
- Molka, Josef. 2007. "Sota minun muistoissani" Puolalaisen pakko-otetun nuorukaisen kokemuksia Taivalkoskelta ja Norjasta sodan ajalta. Taivalkoski: Taivalkosken 4H-yhdistys.
- Otto, Reinhard. n.d. *Arbeitskommandoliste*. Research report, Germany, including the map: "Feldbahnbau Hyrynsalmi-Kuusamo. Stand: 31.1.1943. Armeepionierführer beim (Geb) A.O.K. 20. Z Nr. 109. Anlage 3a."
- Otto, Reinhard. 2008. "Soviet Prisoners of War on the German Lapland Front, 1941–1944." In Sotavangit ja internoidut: Kansallisarkiston artikkelikirja. Prisoners of War and Internees: A Book of Articles by the National Archives, edited by Lars Westerlund: 64–113. Helsinki: Kansallisarkisto.

- Price, Jon. 2005. "Orphan Heritage: Issues in Managing the Heritage of the Great War in Northern France and Belgium." *Journal of Conflict Archaeology*, 1: 181–196. https://doi.org/10.1163/157407705774929006.
- Risbøl, Ole, Daniel Langhammer, Esben Schlosser Mauritsen, and Oula Seitsonen. 2020. "Employment, Utilization, and Development of Airborne Laser Scanning in Fenno-Scandinavian Archaeology A Review." Remote Sensing, 12 (9): 1411. https://doi.org/10.3390/rs12091411.
- Schofield, John, William Gray Johnson, and Colleen M. Beck (eds.) 2002. Matériel Culture: The Archaeology of Twentieth Century Conflict. London: Routledge.
- Schulz, Hans-Peter. 2009. Taivalkoski kulttuuriperintoinventointi 2009. Läntinen alue. Research report, National Board of Forestry, Finland.
- Seamon, David. 2014. "Place Attachment and Phenomenology: The Synergistic Dynamism of Place. In Place Attachment." In Place Attachment. Advances in Theory, Methods and Applications, edited by Lynne C. Manzo and Patrick Devine-Wright: 11–22. New York: Routledge.
- Seitsonen, Oula. 2018. Digging Hitler's Arctic War: Archaeologies and Heritage of the Second World War German Military Presence in Finnish Lapland. PhD dissertation, Department of Archaeology, University of Helsinki. Helsinki: Uniqrafia.
- Seitsonen, Oula. 2019. "Transnationally Forgotten and Re-remembered: Second World War Soviet Mass Graves at Mäntyvaara, Eastern Finnish Lapland." In *Transnational Death. Studia Fennica Ethnologica* 17, edited by Eerika Koskinen-Koivisto, Sarima Saramo, and Hanna Snellman: 178–199. Finnish Literature Society: Helsinki.
- Seitsonen, Oula. 2020. Archaeologies of Hitler's Arctic War. Heritage of the Second World War German Military Presence in Finnish Lapland. Abingdon: Routledge.
- Seitsonen, Oula, Lee G. Broderick, Iain Banks, Mari Olafson Lundemo, Sanna Seitsonen and Vesa-Pekka Herva. in press (2021). "Military supply, everyday demand, and reindeer: Zooarchaeology of Nazi German Second World War military presence in Finnish Lapland, Northernmost Europe." International Journal of Osteoarchaeology.
- Seitsonen, Oula and Vesa-Pekka Herva. 2011. "Forgotten in the Wilderness: WWII PoW Camps in Finnish Lapland." In *Archaeologies of Internment*, edited by Adrian Myers and Gabriel Moshenska: 171–190. New York: Springer.
- Seitsonen, Oula, Vesa-Pekka Herva, Kerkko Nordqvist, Anu Herva, and Sanna Seitsonen. 2017. "A military camp in the middle of nowhere: mobilities, dislocation and the archaeology of a Second World War German military base in Finnish Lapland." *Journal of Conflict Archaeology*, 12 (1): 3–28. https://doi.org/10.1080/15740773.2017.1389496.
- Seitsonen, Oula and Janne Ikäheimo. 2021. "Detecting Archaeological Features with Airborne Laser Scanning in the Alpine Tundra of Northern Finland." *Remote Sensing*, 13 (8): 1599. https://doi.org/10.3390/rs13081599.
- Seitsonen, Oula, Tuuli Koponen, and Vesa-Pekka Herva. 2019. ""Lapland's Roadway": German photography and experience of the European far North in the Second World War. " *Photography and Culture*, 12: 4–21. https://doi.org/10.1080/17514517.2019.1594560.
- Seitsonen, Oula and Eerika Koskinen-Koivisto. 2018. ""Where the F... is Vuotso": Heritage of Second World War forced movement and destruction in a Sámi reindeer herding community in Finnish Lapland." International Journal of Heritage Studies, 24 (4): 421–441. doi:10.1080/13527258.2017.1378903.
- Seitsonen, Oula and Gabriel Moshenska. 2021. "Who owns the 'Wilderness'? Indigenous Second World War Landscapes in Sápmi, Finnish Lapland." In *Conflict Landscapes: Materiality and Meaning in Contested Places*, edited by Nicholas Saunders and Paul Cornish: 183–201. Abingdon: Routledge.
- Stichelbaut, Birger, Suzie Thomas, Oula Seitsonen, Wouter Gheyle, Guy de Mulder, Ville Hemminki, and Gertjan Plets. 2021. "Operation Northern Light: a remote sensing approach to Second World War Conflict archaeology in Northern Finland (Kilpisjärvi, Enontekiö)." In Conflict Landscapes: Materiality and Meaning in Contested Places, edited by Nicholas Saunders and Paul Cornish: 202–220. Abingdon: Routledge.
- Taivainen, Jouni. 2013. "Muinaismuistolain suojelema tai ei Metsien kulttuuriperintö on moninaista ja arvokasta." In Arkeologipäivät 2012. Suomen muinaismuistolaki 50 vuotta: vetreä keski-ikäinen vai raihnainen vanhus & Arkeopeda - opetusta, opastusta, oppimista, edited by Johanna Enqvist, Juha Ruohonen, and Mervi Suhonen: 26–28. Helsinki: Suomen arkeologinen seura.
- Thomas, Suzie, Oula Seitsonen, and Vesa-Pekka Herva. 2016. "Nazi memorabilia, dark heritage and treasure hunting as 'alternative' tourism: understanding the fascination with the material remains of World War II in Northern Finland." *Journal of Field Archaeology*, 41 (3): 331–343. https://doi.org/10.1080/00934690.2016 .1168769.

Thomas, Suzie, Vesa-Pekka Herva, Eerika Koskinen-Koivisto, and Oula Seitsonen. 2019. "Dark Heritage." Encyclopedia of Global Archaeology: 1–11. https://doi.org/10.1007/978-3-319-51726-1_3197-1.

Ursin, Martti. 1980. *Pohjois-Suomen tuhot ja jälleenrakennus saksalaissodan 1944–1945 jälkeen*. Rovaniemi: Pohjois-Suomen historiallinen yhdistys.

Väisänen, Teemu. 2020. "Feldluftpark Pori: Luftwaffen huoltokenttää tutkimassa." SKAS, 1/2020: 64-68.

Westerlund, Lars. 2008. Saksan vankileirit Suomessa ja raja-alueilla 1941–1944. Helsinki: Tammi.

Ylimaunu, Timo, Paul R. Mullins, James Symonds, Titta Kallio-Seppä, Hilkka Heikkilä, Markku Kuorilehto, and Siiri Tolonen. 2013. "Memory of barracks: World War II German 'Little Berlins' and post-war urbanization in Northern Finnish towns." Scandinavian Journal of History, 38 (4): 525–548. https://doi.org/10.1080/0346 8755.2013.822457.

Personal communications

Mirja Fagerroos, Museum Association Railroad of War and Peace, 12.03.2021. Jarkko Kauppinen, Kainuu Museum, 15.03.2021.