



The Pereces 1000 mm gauge railway's environmental effects

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Abstract: To serve the Diósgyőr ironworks a railroad was established with a gauge of 1000 millimetres. From the middle of the separately standing settlement it moved north from to Lyukóbánya and Pereces. For a long time from the mining district the coal was transported on narrow gauge railroad into the smelters .

Operation and shutdown had significant environmental effects. The steam engines thick smoke painted the surrounding houses, the expanding Miskolc slowly sentenced the railroad to death. The shutdown was part of the 1968 traffic competition policy, despite that serious sums were spent on its protection and renovation a few years earlier.

Keywords: narrowgauge, coalmine, railway shutdown, political concept, Miskolc

1. Introduction

With the upswing of the iron metallurgy and the continuous development of the ironworks, the city's industry and the population had increasing coal needs in Miskolc. Therefore the settlement had to involve newer areas into the production and had to seriously exploit the existing mines. Today's Pereces and Lyukóbánya was revealed(1. figure)and the traffic was developed, due to the significant environment changes in the mood of the valleys, and their appearance was totally changed.

This two quarter belong to Miskolc from first of January 1945 ([1]), and they are deteriorated state miner settlements. In the XIX. they did not exist, however in the middle of the XX.century they had blooming mining colonies, a few decades later they were totally declined.

2. Material and Methods

The publication is a part of a PhD research. The basis of the research the Hungarian and the foreign country traffic geography literature processing, which ground ingresses complement primarily. An important role is received the manuscript existing record office substances.

The literature deals with the effect of the traffic have on environment little. It is possible to examine this excellently on a Pereces area. The examined area one the past century Miskolc's part was transformed significantly.

I would like to present this change, to expand the pretzel vendor literature being about 1000 millimetre railroads in one.

3. Results and discussions

A. The 1000 millimeter, narrow-gauge railway in Pereces

In the Pereces valley beside Miskolc, mines were planted from 1860 to exploit the treasures of the land, from 1870 the train's service begun with steam traction on the orbit built in 1869 between Diósgyőr and Pereces [2]. In order to bring the coal to the surface smoothly and to transport it to the Diósgyőr iron furnaces a railroad was built. At the beginning, when the mines were installed, simultaneously, the rail threads were set up, and initially horses towed the wagons, then from 1880 the coal was transported with steam traction to the ironworks, and the workers to the mines.

The building operation entailed exceptionally big earthwork and significantly influenced the landscape's look. This happened in spite of the fact that they were struggling to build the line in a low-cost way, and with small amount of energy expenditure. There was an aim to force the rail to the level of the existing road, however they met with difficulties. More tunnels were established on the line because the relief was structured (1. figure), the first was built 2300 metres long, and was built in 1881 ([2-3]), while the second, a 1800 metres long, had been realized in the middle of the XX. ([4]).

The mines were opened continuously on Pereces and in its neighbourhood, the mines were deepened, as a result of increasing transportation claims ([5]), the railroad developed continuously. A big station with five track were founded on Pereces, while in Barossakna at one of the line's endpoints a shunting yard with six track were worked up, directly next the containers. The most considerable intervention was the Pálinkás station, which was the most considerable interim railway station, along the line. A hump was built up here to compose the wagons and fittings.

The railway and the establishments attached to it became the central character of the peoples life, and determined their environment (2. figure).

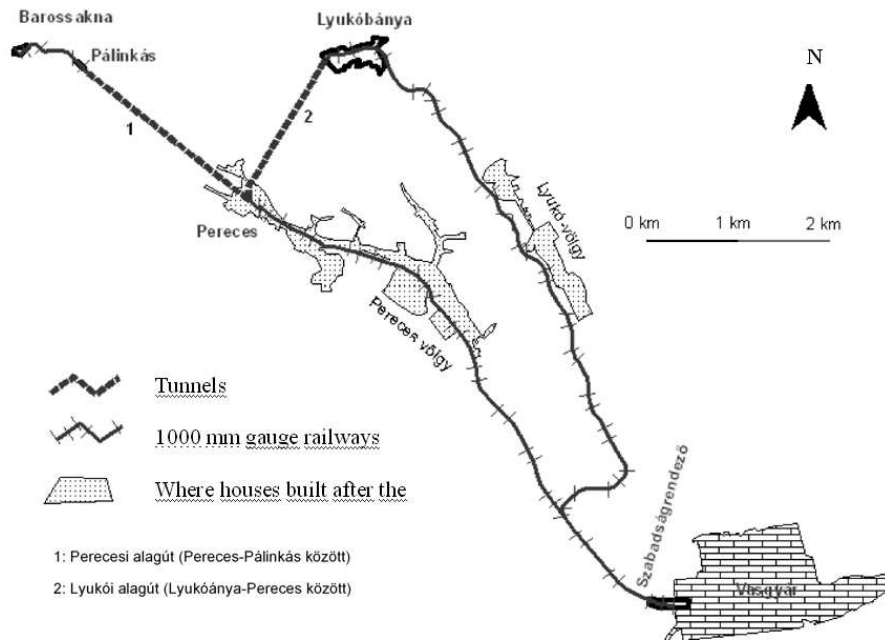


Figure 1: The 1000 millimetre, narrow-gauge railway in Pereces (1. Pereces tunnel between Pereces and Palinkas; 2. Lyukó tunnel between Pereces and Lyukóbánya)



Figure 2: 1000 millimetre fitting on the line

The railway line reached the 19 kilometres length with the construction of a tunnel. It was the largest longitude on the 1000 millimetre Pereces mine railway during its existence. From this length, 4,1 kilometre ran in a tunnel, which shows well the articulateness of the surface. It was one of the reasons, that not normal gauge line were planned, with the narrow-gauge line the expenses were smaller, but it was enough to transport the mined quantity. It was in its prime after the construction of the second tunnel in the years between 1950-60. But the already mentioned, 1968 conception of traffic policy ([6-7]) soon ended its blooming.

The public road received the coal transport. This happened because, according to a survey in the late 1960's, by this time, ([8]) considerable renovations was needed. Despite the fact, that the railway worked well, thousands found work around it. At last, but not least, in 1957 ([9]) three years after the control was handed to the MÁV (National Railway Corporation) ([2]) the Lyukóbánya and Pereces lines were renovated, but an another renovation would had been extremely expensive [10-11]. Anyway the political life turned towards the public road at this time, the development of the public road became more important, and money was spent on road-1s renovation, rather than to the railway.

The railway quickly ended, it only took a few years. The last fittings used the line 31 December in 1971, officially from first of January 1972 the 1000 millimetre mine railways were shutdown.

B. Changes after the railroad's shutdown

The traffic ceased on paper after 1972, and the coal was transported only on public road, however the train service did not cease totally, part of the remained outside values, and the fittings from Barossakna, Lyukó and Pereces were transported to the ironwork's shunting yard (1. figure), which was the soul of the whole line.

Luckily, they did not squander the full substance of the railroad. The engines were used on other lines with 1000 millimetre gauge. Until 1992 ([12]) a system connected the Borsodnádásd record factory with Ózd. Still serviceable wagons and engines were transported from the Pereces line. Unfortunately, most of the engines built because of the tunnels (3. figure) were destroyed. Nowadays, these machines advertise the former development of the Hungarian machine industry.

The traffic grew with directing the railway traffic to the public road. But not only lorries carved considerable burden to the environment buses were air polluting too. In the Pereces and Lyukó lines not only cargo transport, but passenger transport went on. As a result of this, from 01.01.1972 the railway

line was officially closed and its passenger transport was transferred to coaches. From this time, coaches became transport devices in the public traffic, such as it happened earlier along the Lillafüred line [1,13].

With this not only the Pereces and Lyukó-valley became more stressed, but the city was too, because the coaches departed from the Újgyőri main square (early Marx tér), so the transport between the ironworks and the mining fields got into one of Miskolc's newly developed centres. It got its chance of exist and importance from the metallurgy.

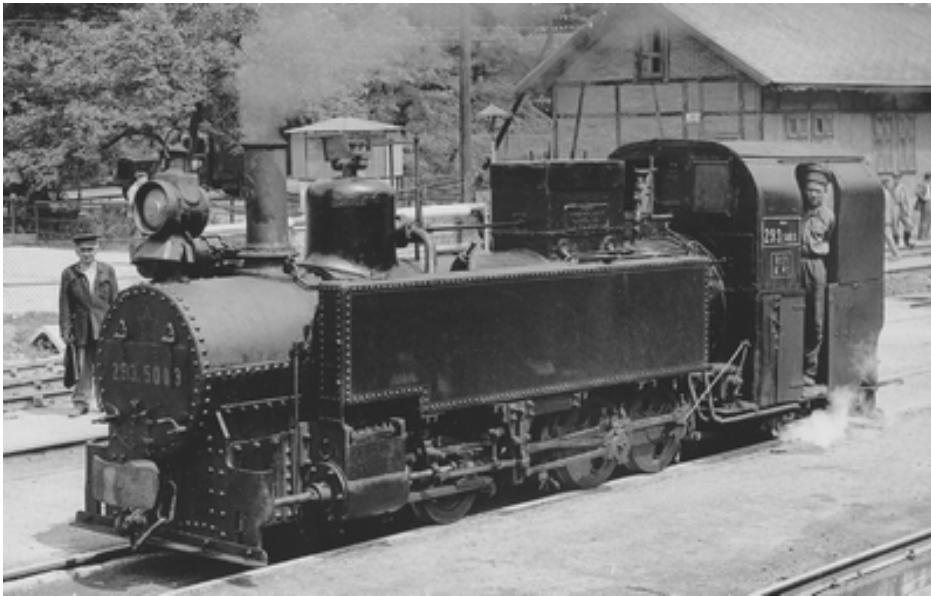


Figure 3: Tunnel engine at Pereces station

4. Conclusion

The life did not stop on Pereces and Lyukóháza with the railroad's shutdown, however an irreversible process had begun. The former narrow-gauge railway values, artifacts are absolutely forgotten nowadays. The former tunnels were filled up, the tracks were picked up, the railway stations are used as mineyards or new buildings took their place.

The former railway lines are dirt-, and macadam roads between the houses in Lyukó and Pereces. Only the few art objects, extending above the living waters, remind the passers-by to the extensive railway system that once worked there.

With the regression of mining, the two settlement devolution began. The minority banked up the former mine camps continuously and in the 1980's the area's erosion had started.

Both valley (1. figure) practically eroded. There are only signs of the former industry, in the same way, than the untouched environment from 150 years ago. The industrial activity, any kind of it, influences the area's future and future look significantly. The local narrow gauge railway's shutdown and liquidation left serious wounds on the landscape. This area, is a good example that we have to make an effort on not allow unused areas alone. The conservation of the values and the protection of the nature have to be equally important. If it would work now, or would worked in 1970's and 1980's, maybe our homeland's longest narrow-gauged tunnel could be tourist destination (1.diagram). The tunnel engines could operate as industrial memories (3. figure), and Pereces and Lyukó could be one of the most important national narrow-gauge railway.

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