



CETRA²⁰¹²

2nd International Conference on Road and Rail Infrastructure
7–9 May 2012, Dubrovnik, Croatia

Road and Rail Infrastructure II

Stjepan Lakušić – EDITOR



Organizer
University of Zagreb
Faculty of Civil Engineering
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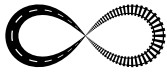
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TOURIST POTENTIAL OF THE INDUSTRIAL RAILWAY NETWORK IN BARANYA

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Abstract

Baranya is a region in eastern Croatia, bordered by the Drava and Danube rivers, marked by the construction of industrial railway network, consisting of factory and forest tracks, in the early 20th century. The main railway line was oriented north-south, leading to Hungary, and it still exudes a dominant influence in Baranya's space. Historically and politically defined, the east-south route was discontinued around the year 1950 due to unprofitable existing infrastructure and the financial inability of the reconstruction. Disproportionate development of the observed polarization and the space around the existing infrastructure is the starting point of this research. The paper will show the network of industrial railways in Baranya, complete with railway stations, the first stop being in Baranjsko Petrovo Selo and the last, eighth station in Batina. The railway was closed and removed in 1968, and its physical disappearance left a trace, a route which, because of its technical characteristics of the substrate lines, is now used for moving agricultural machinery. This paper describes an integrated, interdisciplinary approach to the complex possibilities of revitalization of the missing line and its existing stations, defined and developed within the work of group of teachers and students of the Faculty of Civil Engineering in Osijek. Our concept incorporated regional and local strategic issues in a vision of a tourist route for sustainable vehicles like bicycles, horses, joggers, pedestrians, skiers etc. Railway station buildings still standing along the corridor should, with its newly developed contents, meet the needs and preferences of its users while simultaneously supporting the development of Baranya as a tourist region.

Keywords: Baranya, industrial railway, architectural heritage, tourist routes, revitalization concept

1 Introduction

The process of obtaining independence and establishing sovereignty of the Republic of Croatia that took place at the end of the 20th century was marked by armed conflicts, hardships and population migrations. The state of emergency led to the depopulation of the border regions and inhabitants' exodus to the outskirts of large and medium towns. These processes resulted in the corridor development of urban structures and an irregular spatial development; during that process underpopulated parts of Croatia remained well preserved but were not used in an optimal way.

Such spatial changes took place in the Baranya region in Eastern Croatia while it simultaneously experienced post-war 'socio-demographic depression'. In order to react to these changes, teachers and students at the Faculty of Civil Engineering in Osijek conducted a series of workshops in the area. One of the workshops, called 'Where is the Railway? ', was oriented towards the tourist potential of industrial railways and its complementing structures in Baranya.

2 Baranya – regional contemporary issues

2.1 Spatial and demographic facts

Baranya is a mostly rural region in eastern Croatia, a border zone to Hungary and Serbia. The Croatian part of the Baranya area, 1149 km² in surface, is defined by natural boundaries: the Danube in the east, the Drava to the south and south west, and administrative northern and north-western border with Hungary. Baranya belongs both to the Danube and the Drava River basins. Consistency of its climate is the result of small differences in elevation within the area where the highest peak is 273 m above the sea level and extends diagonally along Baranya Highlands - Banska Kosa - from southwest to northeast. This terrain introduces a number of elements into the Baranya area to which the space has diversified (binding settlements to the space of lowlands and highlands contact, an area suitable for vineyards, orchards) within a homogeneous plain. Croatian Baranya is a part of a larger historical and geographical unit; the division of the County of Baranya into Croatian and Hungarian Baranya was determined by the Trianon peace in 1920. The major part of Baranya today is positioned within the Republic of Hungary (80% of the territory).

In the past, Baranya was involved in various political integrations which set the guidelines for development in alternate directions: north-south and east-west. The multi-layered development of Baranya's net of settlements could be seen as a positive outcome of these processes. Therefore, the disintegration of Baranya's space into the polarization corridor and "the rest" is not necessarily a negative fact. The polarization belt from Bilje to Kneževo is getting more important at the moment and is expected to get even more importance with the finalization of the north-south Baranya part of the European road corridor 5C connecting Budapest and Ploče. Is it necessary to wait for more people to relocate into the urban corridor so that the rest of Baranya could experience the positive effect of the improved infrastructure [1].

2.2 Industrial railway network in Baranya

In mid-19th century, the population of Baranya was oriented towards agriculture. Industrial production occurred in form of rural crafts and agricultural plants and was experiencing rapid growth [2]. At the beginning of the 20th century, the area of Baranya was marked by an economic bloom. In this context it was inevitable that new, planned settlements for industrial workers would emerge across Baranya, presenting vibrant points in space, and positively contributing to its progress.

The infrastructure was rapidly developing, and the historic north-south railway connection was enriched by railway trails in the east-west direction. There were three railway routes in the Baranya triangle in that period – the state line, direction north-south; the industrial line, west-northeast; and the agricultural line, west-east (Fig.1).

Establishing a network of planned settlements was associated with the transport corridor of the agricultural state property Belje industrial railway. That industrial network, built between 1906 and 1915 as an investment of Belje, was a narrow-gauge railway, the distance between the rails being 0,76 meters. It is important to state that, although it was an industrial railway in its origin, it continuously served as means of public transportation as well.

Map copies and originals depicting the railway tracks and bridges, dating from 1925, are available in the State Archives in Osijek, testifying to the simultaneous design and construction of railway tracks with the establishment of planned settlements. Maps show an organized and planned network within Belje with hierarchically marked railway stations. Hierarchy of station categories is visible in the map: the most important being the "emperor's" waiting room station, then stations equipped with a telephone switchboard and the final station - the navigable station Kazuk. We can conclude that these networks significantly influenced the development of intensive and advanced communications within the space of Baranya.

Between 1948 and 1952, 71% of goods in Baranya were transported via industrial rail tracks (then 119 kilometres long). Described railway traffic structure held till the end of the 60s', when the road traffic took over, and the industrial railway became unprofitable. The fact that the replacement system could not follow all the benefits of train transportation facilitated the depopulation of rural areas. The state policy at that moment did not see railway traffic as important and has therefore abolished existing lines. Actual deconstruction of the industrial railway track was carried out in 1968. Today's length of the Baranya railways amounts to just 44% of the old ones and the whole area is marked by the polarization of the population and the economy around the main road and railway corridor, direction north-south [3].

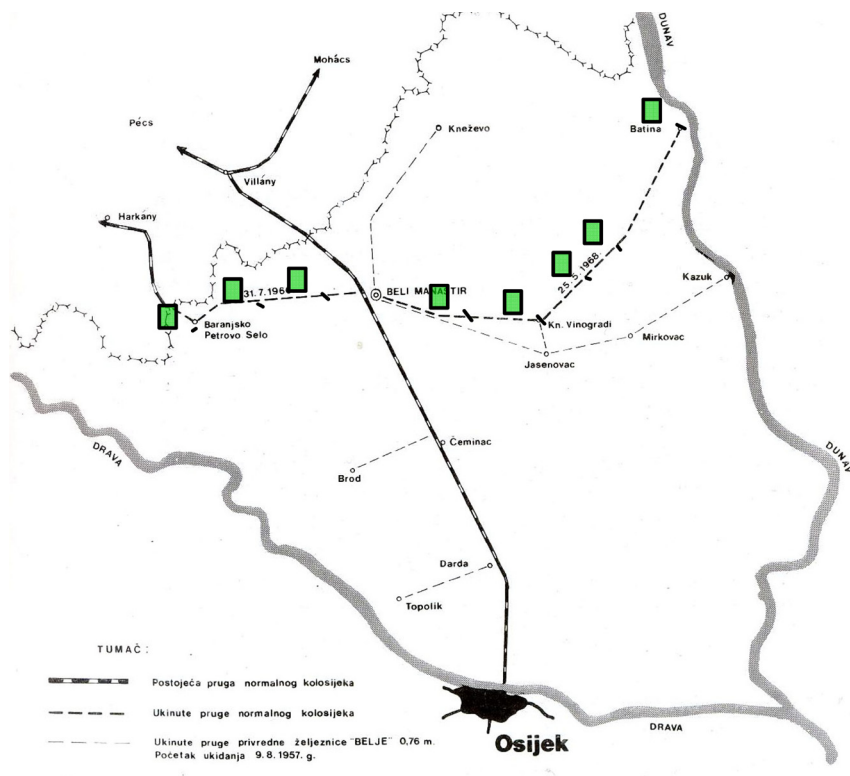


Figure 1 Review of Baranya county railway infrastructure; existing and dismantled railway tracks with station positions.

3 Baranya- tourism development potentials

3.1 Tourism as a factor of growth

The tourism sector is a key driver of economic growth and employment and has a fundamental role in meeting the objectives of the Lisbon strategy: making the EU the most competitive and dynamic economy in the world. Tourism can be seen to impact almost every other sector, from transport to engineering and from architecture to agriculture. It is one of the fastest expanding sectors of the European economy as well as in Baranya in spite of its historical predominantly agricultural image.

While the attractiveness of 21st century's tourist destinations is largely reliant on authenticity and uniqueness of landscape scenery, loss of traditional regional characteristics degrades its tourist value. The objectives of the „Where is the Railway“ student workshop followed the principles of ICOMOS Charter on the built vernacular heritage and ICOMOS International cultural tourism charter, both delivered in Mexico, 1999 – importance of research, documentation and use of non aggressive research methods in preserving natural and cultural heritage, public access to research results; maintaining the continuity of traditional ways of construction and training in the field of traditional knowledge and skills [4]. The 2004 recommendations of the UN-World Tourist Organization [5] state three most important characteristics of sustainable tourism: optimal use of resources from the environment, respect for social and cultural aspects of local communities while preserving the existing architectural cultural heritage and ensuring long-term economic viability of all stakeholders. European Commission has also adopted, in October 2007, an Agenda for a sustainable and competitive European tourism.

3.2 Tourist routes in the region

We based our proposal for re-use of the Baranya industrial railway route on the research of several existing tourist routes in the vicinity. Croatia has a long tradition of tourist routes and actions that this project proposal is leaning on like the Napoleon route on Pelješac island, Truffle roads in Istria, Wine roads of Ilok, Boat route through Spacva woods, Golden Thread roads in Slavonia and, most important, the Wine route project that connects the Batina World War II memorial with the Dubosevica village, located in this area. This cross border area is also already connected through a network of bicycle roads like the Panonian Peace Trail Bike Tour and parts of the Danube bicycle road. The Panonian Peace Trail (Via Pacis Panonnie) is 80 kilometres long, positioned between Osijek and Sombor and in function since 2006. One important example that was based on a similar concept as the one we envisioned is the Parenzana project. Parenzana is the name of the former narrow-gauge railway line that connected Trieste with Poreč, together with 31 other Istrian cities, located today on the territory of three states. It was operational since 1902 and stopped operating in 1935, because of cheaper road traffic solutions. Long forgotten, it came to life in 2006 within the Parenzana: Trail of health and friendship project, a program of tourist valorisation of the Parenzana that turned its track into a recognizable bicycle marathon. The Parenzana II: Revival of the trail of health and friendship project started in 2009 and is expected to end this year.

3.3 Revitalization concept for industrial railway network in Baranya

Kušen notes that there are sixteen basic attractions associated with tourist locations; geological features, climate, water, flora, fauna, protected natural heritage, protected cultural heritage, the culture of life and work, famous persons and historical events, special events and happenings, cultural and religious institutions, natural spas, sport and recreation facilities, tourism paths, trails and roads, attractions for attractions and tourism para-attractions [6]. Tourist routes, as mentioned in the Parenzana example, but especially in the case of Baranya, include several of these characteristics; geological loess structures, a nature park with the abundance of waterways, protected flora and fauna, the culture of life and work - wine tourism, rural tourism, hunting tourism. Forming tourist routes is a concept of merging several locations of similar interest in order to make a holistic tourism product. In this case, the similar interest is preserving the spatial memory of the railway tracks.

In the case of Baranya's industrial railway network, after the dismantling and destruction of the tracks in 1968, all that was left were seven abandoned railway stations along the route - silent witnesses of a disappeared infrastructure. Those stations – Zmajevac, Suza, Kneževi Vinogradi, Karanac, Petlovac, Baranjsko Petrovo Selo and Širine - are left standing in a suburban, rural area, faced with depopulation and stagnation. Profiling this area in terms of susta-

inable rural tourism was a challenge to a group of 20 students and teachers of the Faculty of Civil Engineering Osijek and the main goal was set - recycling the railway track. The process of creation of the route consisted of various activities – research activities, modelling of the route and design of its contents. It started around analysis of collected data, both architectural and structural, as well as on a detailed SWOT analysis of the potentials of railroad route as an entity as well as for specific objects. By developing the SWOT analysis for the whole route students set out a full vision and consequently defined contents for the route from the west to the east and back.

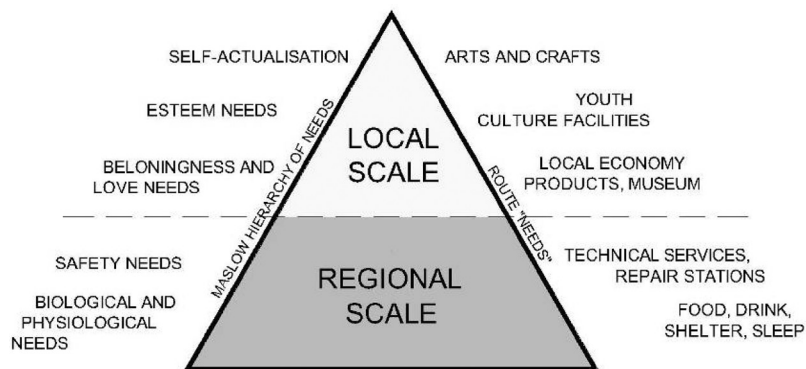


Figure 2 Distribution of tourist contents on regional and local scale according to Maslow hierarchy of needs.

The first step in designing the workshop was to explore and determine the conditions that preceded the polarization of the network of settlements in Baranya. The research revealed that the east-west direction was once supported by standard-gauge railroad which was used for freight and passenger traffic. The railway connected the Republic of Hungary on the western border of Baranya with the first station in Baranjsko Petrovo Selo and continued with a series of stations. The concept set to revive the imprint of the railway as a traffic route for vehicles like bicycles, horse carriages, pedestrians, Nordic skiers etc. The seven stations along the traffic corridor were supposed to fulfil the needs and wishes of the users (with their contents) as well as to contribute to the development of Baranya as a tourist region with its gastronomic offer from the local resources.

The next step was to adjust content to micro location; the object near the village with a strong gastro tradition supported the development of the micro location and became a point on the route which provides consummation. Other contents were distributed on other locations in the same way. The following contents were anticipated: inn with a horse-stable, multipurpose room for gatherings (NGOs, group's et al), museum and souvenir shop, a restaurant, a wine house, a hotel and a cycle repair service.

The last step was to set a concept of rebuilding each station considering the shape of the object. Severally devastated buildings were revitalized by modern technical solutions, while objects in good condition were modified in a way that the current condition stays as close to the original as possible (Fig.2).

The concept of sustainability of the planned route is based on a sequence of locations connected in a continuous circle. It is a chain of small scale rings that could always be 'changed' and 'repaired' according to local development trends so the main chain will not be 'broken'. Every small scale ring represents one location - a station building supported with complementary, already existing, contents like wine, gastronomy, archaeology etc (Fig.3).

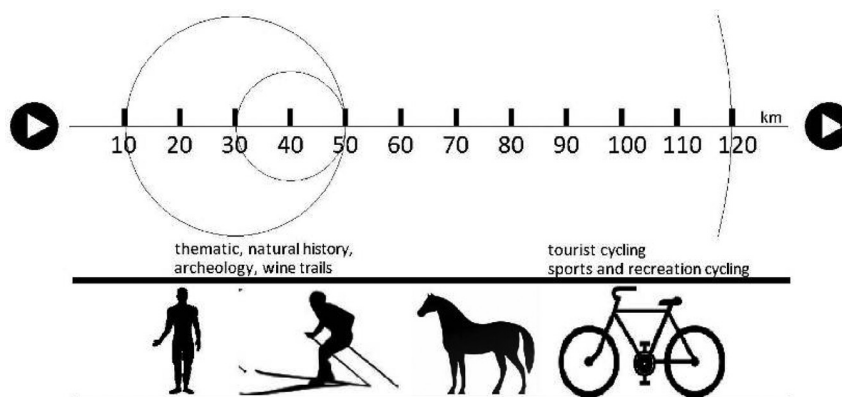


Figure 3 Model of a sustainable tourist route based on distances between stations [7].

4 Conclusion

European experiences with reviving railway routes and stations brought together partners from five European countries in the RARE project (within the Interreg IIIB CADSES program), with the aim to regenerate areas of railway stations in the urban fabric. Spaces chosen in the RARE project were abandoned and under-utilized but, at the same time, were located in central areas of cities where land availability achieved great value and where land demand was high. Issues that have shaped the parameters for the assessment of their potential are directly related to the context and the specific area (space characteristics, previous and current location purposes, possible advantages of location). Therefore, identifying and connecting with the location was the first step in the process of revitalization of railway infrastructure.

On a smaller scale, we tried to implement this frame on the example of an industrial railway network in Baranya. The concept of its revival started with a broader survey of regional issues (Baranya), continued based on local requirements (settlement network) and was implemented according to micro location status (station buildings).

Although our work remains currently in the field of ideas and concepts, it started a process of raising awareness towards the issue of forgotten industrial heritage of Baranya.

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